

Checklist for the crop weeds of Paraguay

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Academic editor: A. Machado | Received 10 August 2016 | Accepted 7 October 2016 | Published 18 October 2016

Citation: De Egea J, Mereles F, Peña-Chocarro MC, Céspedes G (2016) Checklist for the crop weeds of Paraguay. *PhytoKeys* 73: 13–92. doi: 10.3897/phytokeys.73.10135

Abstract

Paraguay, a country whose economy is based mainly on agriculture and livestock for export, has experienced a major expansion in mechanized crops during the last few decades. Despite being heavily dependent on agriculture, Paraguay has very limited research on crop weeds, in spite of these having a high economic impact on production. This work aims to update and enhance the knowledgebase on the most common weeds affecting productive fields throughout the different ecoregions of Paraguay. We present here the first checklist of crop weeds for the country, which includes a total of 256 taxa (189 species, 10 subspecies, 54 varieties and 3 forms), with the most species-rich families being Poaceae and Asteraceae followed by Malvaceae, Amaranthaceae, Fabaceae and Solanaceae. The list includes three new records for the country. Synonyms, distribution details within Paraguay, habit and a voucher specimen are provided for each taxon.

Keywords

Weeds, crops, Paraguay, agro-ecosystems, new records

Introduction

Weeds can be defined as plants (not necessarily alien) that grow on sites where they are not wanted and which have a detectable economic and/or environmental impact (Richardson et al. 2000, Pyšek et al. 2004). They overlap partly with invasive plants, which are introduced species that cause problems, either in agriculture or in natural areas. According to Pyšek et al. (2004), there have been terminological misunderstandings in studies dealing with plant invasions, partly caused by different perceptions of plant invasions by particular biological disciplines and viewpoints. As shown by these authors, plants encroaching on habitats in which they were not present before can be assessed from the ecological point of view (and termed *colonizers*), from the biogeographical point of view (*invaders*, or *alien plants* in a more general sense), or from the anthropocentric point of view (termed *weeds*, harmful species, problem plants, noxious plants, pests, etc.).

Paraguay has a total area of 406,752 km² and is divided into two regions by the Río Paraguay: the Oriental Region and the Occidental Region. The economy is based mainly on agriculture and livestock for export; between the years 2013–2014, approximately 52,381 km² were dedicated to temporary and permanent crops (DGEEC 2015), particularly soybean (35,000 km²), corn (8,000 km²) and wheat (5,600 km²). During the second half of the twentieth century, global soy production grew tenfold from 27 million tons to 269 million tons (WWF 2016). This increased production was the result of a major expansion in mechanized crops, including other crops that form part of this complex such as wheat, corn, sorghum, canola, among others. It is expected that production will double by 2050 (Bruinsma 2009, WWF 2014). Indeed, Paraguay plays a strong role in this soybean industry; during the 2012–2013 harvest, Paraguay ranked sixth as a global producer and fourth in exports. Itapúa and Alto Paraná have been the highest producing departments, while expansion currently occurs in the departments of San Pedro, Canindeyú and Alto Paraguay (WWF 2016).

Agriculture in Paraguay is carried out on a variety of very distinct soil types in both natural regions. The soils in the Oriental Region are for the most part reddish in colour, resulting from geological events during the Precambrian era and Jurassic and Cretaceous periods (Bertoni and Gorham 1973). These soils include the leptosols and arenosols, which are generally poor in nutrients, and the loamy sand and sandy loam regosols, which are rich in nutrients and where most of the mechanized crops in the region have been carried out (González Erico 2007). In the Occidental Region, most of the soil types are brackish, with a variable content of clay, including planosols, solonetz, gleysols and regosols, where mechanized crops are carried out (Proyecto Sistema Ambiental del Chaco 1992–1997).

Despite being mainly an agricultural country, Paraguay does not have much in terms of research on crop weeds, even in cases where these have a high economic impact on production. Only two sources can actually be considered as references on the subject: Lurvey (1983), the only weed guide available for the country, and the *Flora del Paraguay* collection (Spichiger and Bocquet 1983–1985, Spichiger 1987–1989,

Spichiger and Ramella 1990–2002, Ramella and Perret 2008–2014) that superficially covers the behavior of some species, in terms of their weediness, within the families included in the collection. Even herbarium data has proved to be of little use to determine the level of weediness of a species, due to the well-known biases in plant collection towards natural areas.

Weeds have a particular set of skills for survival through mechanisms such as high competitive ability, high seed production, seed production for as long as growing conditions permit, rapid growth throughout vegetative phase to flowering, germination requirements fulfilled in many environments, adaptations for short and long dispersal and great longevity of seeds, self-compatible but not completely autogamous or apomictic, and when cross-pollinated, either pollinated by unspecialized visitors or by wind (Baker 1965, Baker 1974, Lorenzi 2000). Their development in productive areas tends to reduce the quality and quantity of the crop yield, making it difficult to harvest, and in some extreme cases even making it unviable (Guglieri-Caporal et al. 2011). According to Pott et al. (2006), success in controlling invasive plants begins with the floristic inventory of the infesting species and knowledge of the biology of those species that are predominant.

Because of their numerous interactions with humans, their biology, ecology, evolution and community dynamics, weeds are an important subject of study (Kuester et al. 2014). In fact, the study of plant species considered to be weeds in agro-ecosystems is a subject of high interest in the area of invasion ecology, not only because of their natural ability to become established in natural and semi-natural environments (Figuerola et al. 2004, Pyšek et al. 2004) with the consequent great ecological harm they can cause to ecosystems, but also because of the special attributes that make these plant species more invasive (Rejmánek and Richardson 1996), and the way they respond to human disturbance (Hill et al. 2002). Other studies have also focused on revealing taxonomic patterns among natural area invaders and agricultural weeds (Daehler 1998, Kuester et al. 2014), while Conservation Agriculture builds upon weed ecology to generate integrated and sustainable weed management strategies (Bajwa 2014).

Regarding the increasing importance of weed science in a country such as Paraguay, which depends heavily on agricultural production, this work aims to update and enhance the knowledgebase of the most common weeds affecting productive fields throughout the different ecoregions of the country, as well as the generation of relevant information to facilitate their identification and management.

Methods

Paraguay is a land-locked country located between 19° and 28° south latitude and 54° and 63° west longitude at the heart of the South American continent, and lies entirely within the Río de la Plata drainage system, second only in size to the Amazon basin. The country is divided into two regions by the Río Paraguay: the Oriental Region, or eastern region, also known as the Paraná region, and the Occidental Region, or western

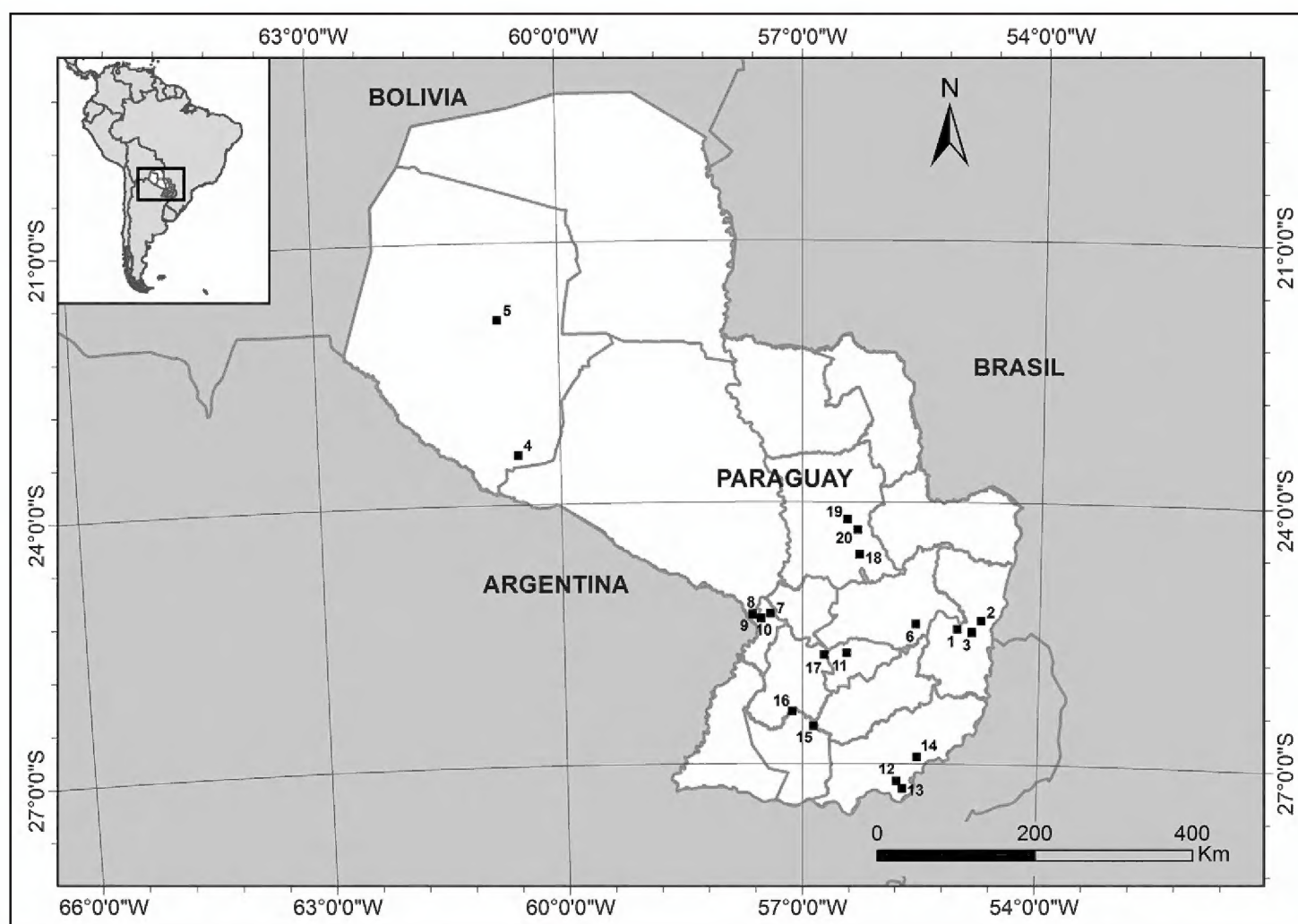


Figure 1. Location of the crop weed collection sites

region, also known as the Chaco (part of the Gran Chaco Americano shared by Argentina, Bolivia and Paraguay). Paraguay is divided into 17 departments, 14 of which are located to the east of the Río Paraguay (De Egea et al. 2012).

While building the checklist, we included: 1) a survey of all plant species occurring in key sites, mainly in areas of mechanized soybean, sorghum, sugarcane, corn and rice, where weed management and control was being periodically implemented (Figure 1, Table 1). Each site was surveyed once, at a time when crop fields presented a high level of weed infestation and prior to any weed control activities. Sampling was carried out between 1–3 days, depending on the size of the available crop area per site, by surveying a series of random points (up to 8 per day) to collect the weeds occurring within a 50 meter radius. The data collection included the random collection of plant specimens, georeferencing of the records, the identification of specimens and the resolution of taxonomic problems. Where possible, specimens were collected in quadruplicate; the set of originals were stored in FCQ and duplicates were sent to BM, G and CTES; and 2) the systematization of data available in the literature. Three sources were considered as reference: Lurvey (1983), the *Flora del Paraguay* collection, and the database of The International Survey of Herbicide Resistant Weeds (Heap 2016), containing a list of the more resistant weed species in the region. Online databases and herbarium resources such as TROPICOS (2016) and the *Catálogo de las plantas vasculares del Cono Sur* (Zuloaga and Belgrano 2015) were also consulted.

Table 1. Crop weed collection sites.

Map key	Department	Locality	Type of habitat/crop
1	Alto Paraná	Colonia Yguazú, Centro de Investigación Agropecuaria del Paraguay	Soybean crops
2	Alto Paraná	Hernandarias	Soybean crops
3	Alto Paraná	Minga Guazú, Universidad Nacional del Este (UNE) experimental plots	Soybean crops
4	Boquerón	Estancia Toro Mocho	Cattle pastures and forest edges
5	Boquerón	Mariscal Estigarribia, Estancia Jeroviá	Soybean and sorghum crops
6	Caaguazú	Juan Eulogio Estigarribia	Soybean crops
7	Central	Areguá	Strawberry crops
8	Central	Asunción	Vegetable patch/home garden
9	Central	Asunción	Disturbed soils
10	Central	San Lorenzo, Universidad Nacional de Asunción, experimental plot	Potato, tomato and cabbage crops
11	Guairá	Villarrica	Disturbed soils
12	Itapúa	Capitán Miranda	Soybean crops
13	Itapúa	Nueva Alborada District	Soybean crops
14	Itapúa	Pirapó	Soybean crops
15	Misiones	San Miguel, Establecimiento La Graciela	Rice crops
16	Misiones	Villa Florida	Disturbed soils
17	Paraguarí	Villarrica – Paraguarí road	Sugarcane crops
18	San Pedro	Barrio San Pedro, Dekalpar crops	Corn crops
19	San Pedro	Cruce Liberación	Disturbed soils
20	San Pedro	Instituto Paraguayo de Tecnología Agrícola (IPTA) experimental plots	Fruit crops

Data was compiled in a MS Access database. Flowering plant family circumscription follows APG III (Stevens 2001 onwards) and pteridophyte classification follows Smith et al. (2006). In the checklist, families are sorted alphabetically and genera are sorted alphabetically within families. For each taxon we present the accepted name, place and date of publication, synonyms, habit, general distribution in Paraguay, residence status (all species are native except where indicated), and one voucher specimen. Relevant bibliographic citations are included for taxa recorded in literature, but not found during field surveys nor in the consulted herbaria (BM, CTES, FCQ, and PY). Synonymy follows Zuloaga and Belgrano (2015), except for those taxa covered in more recent literature. Herbarium acronyms used in the text follow Index Herbariorum (Thiers, continuously updated). New reports of taxa for Paraguay are marked with an arrowhead (►) and those taxa not cited in Zuloaga and Belgrano (2015) for Paraguay but recorded in other publications or databases are marked with an asterisk (*).

Data resources

All occurrence data underpinning the checklist have been uploaded to the Natural History Museum Data Portal (<http://dx.doi.org/10.5519/0060042>) and are provided as a data supplement to this paper.

Results and discussion

The list includes a total of 256 taxa (189 species, 10 subspecies, 54 varieties and 3 formas), making up 38 families and 141 genera, of which all except one are angiosperms. There is only one pteridophyte listed, *Pteridium arachnoideum* (Kaulf.) Maxon, a very close relative of *Pteridium aquilinum* (L.) Kuhn, a cosmopolitan species with a vigorous vegetative reproductive system (Baker 1974), which is a very common weed worldwide.

The most species-rich families are Poaceae, Asteraceae and Malvaceae, followed by Amaranthaceae, Fabaceae, Solanaceae, Polygonaceae and Cyperaceae (see Table 2). According to Baker (1974), Malvaceae, Amaranthaceae, Cyperaceae and Poaceae are the families which have a higher number of weed species in warm regions, in line with our results.

Over eighty-three percent (213) of the species in the Checklist are herbs, 14.8% (38) woody species (small trees, shrubs or subshrubs) and only 1.95% (5) are vines (Figure 2).

The majority of the listed taxa are native to Paraguay (209), representing 81.64% of the total, including one endemic species (*Turnera grandidentata* (Urb.) Arbo), while the remaining 47 taxa are introduced. Families with the highest number of non-native species are Poaceae with 16 taxa followed by Brassicaceae with 4 taxa. Most introduced species remain within the status of established plants, except for some species which also show invasive behaviour. Such is the case of *Calotropis procera* (Aiton) W.T.Aiton, reported for the first time in Paraguay in 1994 (Mereles and Degen 1994), found

Table 2. Number of genera and taxa in the largest families.

Families	Genera	Taxa
Poaceae	22	50
Asteraceae	29	41
Malvaceae	11	20
Amaranthaceae	4	13
Fabaceae	9	12
Solanaceae	3	12
Polygonaceae	2	11
Cyperaceae	4	10
Euphorbiaceae	5	10
Other families	52	77

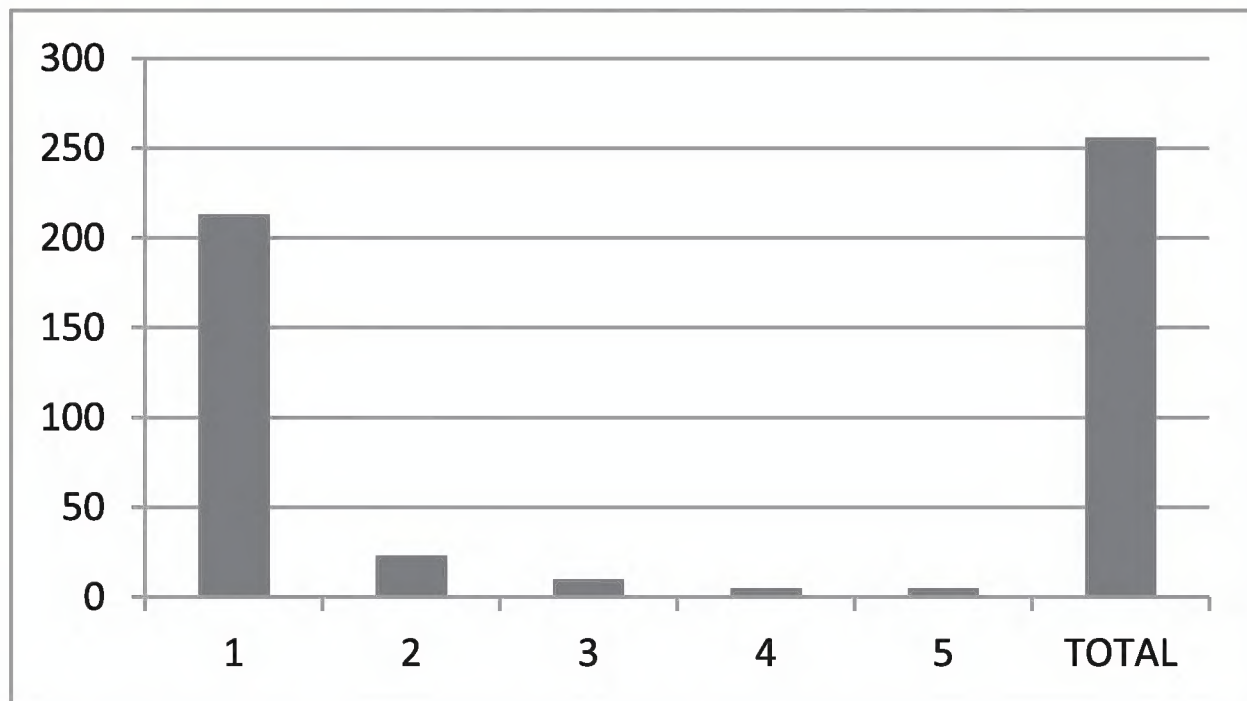


Figure 2. Life forms of the taxa included. **1** herbs **2** subshrubs **3** shrubs **4** small trees **5** vines.

in cattle pastures in northern Paraguay, and currently quite frequent as a weed of difficult eradication within the dry Chaco. *Urochloa brizantha* (Hochst. ex A.Rich.) R.D.Webster and *U. decumbens* (Stapf) R.D.Webster are also two species that were introduced for grazing (Zuloaga et al. 2014), and are now found in both natural and agro-ecosystems. These three species were also identified as invasive species in Brazil (Base de dados nacional de espécies exóticas invasoras I3N Brasil 2016).

The list includes three new records for the country, collected during crop surveys (*Avena sativa* (J.Presl.) Barkworth subsp. *sativa*, *Cyperus eragrostis* Lam. var. *eragrostis* and *Leonurus cardiaca* L. It also includes another seven taxa not listed in Zuloaga & Belgrano (2015), as being present in Paraguay, but recorded in TROPICOS (2016) or in recent publications (De Egea et al. 2016): *Amaranthus hybridus* L. subsp. *cruentus* (L.) Thell., *Avena sativa* L. subsp. *sativa*, *Capsella bursa-pastoris* (L.) Medik., *Commelina benghalensis* L., *Cyperus eragrostis* Lam. var. *eragrostis*, *Glandularia cabreriae* (Moldenke) Botta, *Leonurus cardiaca* L., *Oldenlandia lancifolia* (Schumach.) DC., *Tragus australianus* and *Tridax procumbens* L.

Eight taxa mentioned in literature, but not found during field surveys nor in the consulted herbaria, were also included in the checklist: *Capsella bursa-pastoris* (L.) Medik., *Lepidium virginicum* L., *Raphanus raphanistrum* L. (Lurvey 1983), *Digitaria aequiglumis* (Hack. & Arechav.) Parodi var. *aequiglumis*, *Echinochloa oryzoides* (Ard.) Fritsch (Zuloaga et al. 1994), *Paspalum urvillei* Steud., *Setaria scandens* Schrad. (Zuloaga et al. 2014), and *Polygonum aviculare* L. (Cialdella and Brandbyge 2001).

Nine species were found to be the most frequent and abundant within all crops surveyed: *Amaranthus hybridus* L., *Bidens pilosa* L., *Conyza bonariensis* (L.) Cronquist, *Commelina erecta* L., *Eleusine indica* (L.) Gaertn., *Euphorbia heterophylla* L., *Digitaria insularis* (L.) Fedde, *Richardia brasiliensis* Gomes, and *Solanum americanum* Mill. These species were found in both natural regions of Paraguay and on different soil types, showing a greater plasticity/resilience than the other species found. Overall, they

are species with high adaptability, fast growth, resistance to drought and high biomass and seed production. It is also likely that the seeds of these weed species accompany the seeds of the harvested grain crops. All these have been listed and highlighted in regional literature on weeds as being problematic species (Ferrari 2012, Guglieri-Caporal 2011, Lorenzi 2000), and with the exception of *Commelina erecta* and *Richardia brasiliensis*, are considered among the weeds with greatest herbicide resistance according to The International Survey of Herbicide Resistant Weeds (Heap 2016).

Checklist

FERNS

DENNSTAEDTIACEAE

Pteridium arachnoideum (Kaulf.) Maxon, J. Wash. Acad. Sci. 14: 89. 1924.

Syn.: *Pteridium aquilinum* (L.) Kuhn var. *arachnoideum* (Kaulf.) Brade, *Pteridium aquilinum* ssp. *psittacinum* (C.Presl) C.Chr, *Pteridium aquilinum* var. *umbrosum* H.Christ, nom. illeg., *Pteridium caudatum* (L.) Maxon ssp. *arachnoideum* (Kaulf.) Lellinger, *Pteridium esculentum* (G.Forst.) Cockayne ssp. *arachnoideum* (Kaulf.) J.A.Thomson, *Pteridium psittacinum* (C.Presl) Maxon, *Pteris aquilina* L. var. *arachnoidea* (Kaulf.) D.C.Eaton, *Pteris aquilina* var. *psittacina* (C.Presl) Baker, *Pteris arachnoidea* Kaulf., *Pteris esculenta* G.Forst., *Pteris psittacina* C.Presl.

Herb.

Departmental distribution: Amambay, Caazapá, Canindeyú, Cordillera, Guairá, Paraguari, San Pedro.

Voucher: J. De Egea et al. 1340 (BM, FCQ, G).

SEED PLANTS

ACANTHACEAE

Justicia squarrosa Griseb., Abh. Königl. Ges. Wiss. Göttingen 19: 226. 1874.

Syn.: *Beloperone ciliata* (Nees) Hook.f., *B. squarrosa* (Griseb.) Lindau, *Dianthera ciliata* (Nees) Benth. & Hook.f., hom. illeg., *Jacobinia ciliata* Nees.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Presidente Hayes.

Voucher: F. Mereles & S. Soria 9978 (FCQ).

ALISMATACEAE

Sagittaria montevidensis Cham. & Schltdl. subsp. *montevidensis*, Linnaea 2: 156. 1827.

Syn.: *Sagittaria andina* Phil., *S. montevidensis* f. *normalis* Hauman, nom. inval., *S. multinervia* Larrañaga, *S. pugioniformis* L. var. *montevidensis* (Cham. & Schltdl.) Kuntze

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: G. Céspedes et al. 445 (BM, FCQ).

AMARANTHACEAE

Alternanthera ficoidea (L.) P.Beauv., Fl. Oware 2: 66. 1818.

Syn.: *Alternanthera polygonoides* (L.) R.Br. ex Griseb. var. *diffusa* (Mart.) Hicken, *A. tenella* Colla, *Bucholzia ficoidea* (L.) Mart., *Gomphrena ficoidea* L.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Central, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1230 (FCQ).

Alternanthera paronychioides A.St.-Hil. subsp. *chacoënsis* (Morong ex Morong & Britton) Pedersen, Darwiniana 14: 440. 1967.

Syn.: *Alternanthera chacoënsis* Morong ex Morong & Britton, *A. ficoidea* (L.) Sm. ssp. *chacoënsis* (Morong ex Morong & Britton) Pedersen, *A. morongii* Uline, *A. paronychioides* var. *chacoënsis* (Morong ex Morong & Britton) Pedersen, *A. paronychioides* var. *robusta* Chodat.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Caaguazú, Central, Concepción, Cordillera, Guairá, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: F. Mereles et al. 10060 (FCQ).

Alternanthera philoxeroides (Mart.) Griseb. f. ***philoxeroides***, Abh. Königl. Ges. Wiss. Göttingen 24: 36. 1879.

Syn.: *Achyranthes paludosa* Bunbury, *Achyranthes philoxeroides* (Mart.) Standl., *Alternanthera philoxeroides* (Mart.) Griseb. var. *acutifolia* (Mart.) Hicken, *Alternanthera philoxeroides* var. *obtusifolia* (Moq.) Hicken, *Bucholzia philoxeroides* Mart., *B. philoxeroides* var. *obtusifolia* Mart., *Mogiphanes philorexoides* D. Parodi, *Telanthera philoxeroides* (Mart.) Moq., *T. philoxeroides* var. *denticulata* Seub., *T. philoxeroides* var. *obtusifolia* Moq.

Herb aquatic.

Departmental distribution: Alto Paraguay, Central, Presidente Hayes.

Voucher: N. Soria 332 (FCQ).

****Amaranthus hybridus*** L. subsp. ***cruentus*** (L.) Thell., Fl. Adv. Montpellier 205. 1912.

Syn.: *Amaranthus cruentus* L., *A. flavus* L., *A. paniculatus* L.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Guairá, San Pedro.

Voucher: F. Mereles & S. Soria 10212 (FCQ).

Amaranthus hybridus L. subsp. ***hybridus***, Sp. Pl. 2: 990. 1753.

Syn.: *Amaranthus chlorostachys* Willd., *A. hybridus* L. var. *hypochondriacus* (L.) Rob., *A. hybridus* var. *quitensis* (Kunth) Covas, *A. hypochondriacus* L. var. *hypochondriacus*, *A. quitensis* Kunth, *A. quitensis* var. *stuckertianus* Thell.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Boquerón, Central, Guairá, Itapúa, Ñem-bucú, Presidente Hayes, San Pedro.

Voucher: F. Mereles & S. Soria 9946 (FCQ).

Amaranthus muricatus (Moq.) Hieron., Pl. Diaph. Fl. Argent. 227. 1882.

Syn.: *Euxolus muricatus* Moq.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1243 (BM, FCQ).

Amaranthus standleyanus Parodi ex Covas, Darwiniana 5: 339. 1941.

Syn.: *Amaranthus parodii* Standl., hom. illeg., *A. vulgarissimus* sensu Thell. non Speg.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Misiones, Presidente Hayes.

Voucher: F. Mereles et al. 10174 (BM, CTES, FCQ, G).

Amaranthus viridis L., Sp. Pl., ed. 2. 2: 1405. 1763.

Syn.: *Amaranthus gracilis* Desf., *Chenopodium caudatum* Jacq., *Euxolus caudatus* (Jacq.) Moq., *E. viridis* (L.) Moq.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Central, Concepción, Guairá, Paraguairí, Presidente Hayes, San Pedro.

Voucher: F. Mereles & S. Soria 10186 (FCQ).

Dysphania ambrosioides (L.) Mosyakin & Clemants, Ukrayins'k. Bot. Zhurn. 59(4): 382. 2002.

Syn.: *Ambrina ambrosioides* (L.) Spach, *A. anthelmintica* Spach, *A. parvula* Phil., *Chenopodium ambrosioides* L., *Ch. ambrosioides* var. *dentata* Fenzl, *Ch. ambrosioides* f. *dentatum* (Fenzl) Aellen, *Ch. ambrosioides* ssp. *euambrosioides* Aellen, *Ch. ambrosioides* var. *genuinum* Willk., *Ch. ambrosioides* f. *genuinum* (Willk.) Aellen, *Ch. ambrosioides* var. *integrifolium* Fenzl, *Ch. ambrosioides* f. *integrifolium* (Fenzl) Aellen, *Ch. ambrosioides* var. *pinnatifidum* Willk., *Ch. ambrosioides* f. *pinnatifidum* (Willk.) Aellen, *Ch. ambrosioides* f. *rotundantum* Aellen, *Ch. ambrosioides* var. *suffruticosum* (Willd.) Asch. & Graebn., *Ch. ambrosioides* var. *typica* Speg., *Ch. ambrosioides* var. *typicum* (Speg.) Aellen, *Ch. suffruticosum* Willd., *Ch. suffruticosum* ssp. *remotum* Vorosh., *Teloxys ambrosioides* (L.) W.A. Weber, *A. incisa* Phil.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguairí, Presidente Hayes.

Voucher: R. Degen 120 (FCQ).

Gomphrena celosioides Mart. f. ***aureiflora*** (Chodat) Pedersen, *Darwiniana* 20: 272. 1976.

Syn.: *Gomphrena celosioides* var. *aureiflora* Stuchlik, *G. celosioides* f. *grandifolia* Stuchlik, *G. celosioides* f. *parvifolia* Stuchlik, *G. decumbens* Jacq. f. *aureiflora* Chodat, *G. decumbens* var. *aureiflora* (Chodat) Stuchlik, *G. hygrophila* Mart. f. *luteiflora* Herzog.

Herb.

Departmental distribution: Guairá, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *J. De Egea et al.* 1316 (BM, FCQ).

Gomphrena celosioides Mart. var. ***celosioides***, *Nova Acta Phys.-Med. Acad. Caes. Leop.-Carol. Nat. Cur.* 13: 301. 1826.

Syn.: *Gomphrena decumbens* Jacq. f. *albiflora* Chodat & Hassl., *G. decumbens* var. *albiflora* (Chodat & Hassl.) Stuchlik, *G. decumbens* var. *genuina* Stuchlik, nom. inval., *G. perennis* L. f. *ramosissima* Stuchlik, *Xeraea celosioides* (Mart.) Kuntze

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Caaguazú, Caazapá, Central, Cordillera, Guairá, Itapúa, Ñeembucú, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 9913 (FCQ).

Gomphrena elegans Mart. var. ***elegans***, *Nov. Gen. Sp. Pl.* 2(1): 17, t. 119. 1826.

Syn.: *Gomphrena elegans* Mart. var. *genuina* Stuchlik, nom. inval., *G. elegans* f. *nigrovirida* Stuchlik, *G. hilariana* Moq., *G. viridifolia* Suess., *Xeraea elegans* (Mart.) Kuntze, *X. hilariana* (Moq.) Kuntze

Herb.

Departmental distribution: Canindeyú, Cordillera, Guairá, Paraguari.

Voucher: *E. Zardini & R. Velázquez* 11556 (FCQ).

Gomphrena perennis L. var. ***perennis***, *Sp. Pl.* 1: 224. 1753.

Syn.: *Gomphrena perennis* L. ssp. *genuina* Stuchlik, nom. inval., *G. perennis* f. *parvifolia*, *G. perennis* f. *villosa*, *G. villosa* Mart., *Xeraea perennis* (L.) Kuntze, *X. villosa* (Mart.) Kuntze

Herb.

Departmental distribution: Alto Paraguay, Boquerón.

Voucher: *F. Mereles & S. Soria* 9940 (BM, CTES, FCQ, G).

APIACEAE

Cyclospermum leptophyllum (Pers.) Sprague var. *leptophyllum*, J. Bot. 61: 131. 1923.

Syn.: *Apium ammi* Urb., *A. ammi* f. *filamentosum* (Kuntze) H. Wolff, *A. ammi* var. *filamentosum* Kuntze, *A. ammi* Urb. var. *genuinum* H. Wolff, *A. ammi* var. *leptophyllum* (Pers.) Kuntze, *A. ammi* f. *nanum* Kuntze, *A. ammi* f. *pedunculata* Chodat.

A. laciniatum (DC.) Urb. f. *elatus* (Hook. & Arn.) H. Wolff, *A. leptophyllum* (Pers.) F. Muell. ex Benth., *A. ranunculifolium* auct. non Kunth, *A. ranunculifolium* (DC.) Reiche, comb. illeg., *Helosciadium laciniatum* DC. var. *elatus* Hook. & Arn., *H. leptophyllum* (Pers.) DC., *H. ranunculifolium* DC., *Pimpinella leptophylla* Pers.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Caazapá, Central, Guairá, Ñeembucú, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1321 (FCQ).

APOCYNACEAE

Asclepias curassavica L., Sp. Pl. 1: 215. 1753.

Herb. Introduced.

Departmental distribution: Amambay, Canindeyú, Central, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes.

Voucher: F. Mereles et al. 10011 (BM, FCQ, G).

Asclepias mellodora A.St.-Hil., Pl. Rem. Bres. 227. 1824.

Syn.: *Asclepias campestris* Decne., *A. campestris* var. *angustifolia* Kuntze, *A. campestris* var. *schlechteri* Kuntze, *A. curupi* E. Fourn., *A. jangadensis* S. Moore, *A. marginata* Decne. var. *bodenbenderi* Kuntze, *A. mellodora* var. *bodenbenderi* (Kuntze) Bollwinkel, *A. mellodora* var. *minor* A.St.-Hil., *A. mellodora* var. *multinervis* (E. Fourn.) Bollwinkel, *A. multinervis* E. Fourn., *A. nervosa* Decne., *A. papillosa* Silveira, *A. umbellata* Vell.

Herb.

Departmental distribution: Amambay, Boquerón, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1329 (FCQ).

Calotropis procera (Aiton) W.T.Aiton, Hort. Kew., ed. 2 2: 78. 1811.

Syn.: *Asclepias procera* Aiton

Shrub or small tree. Introduced.

Departmental distribution: Alto Paraguay, Boquerón.

Voucher: *F. Mereles & S. Soria* 9983 (FCQ, G).

ARALIACEAE

Hydrocotyle bowlesioides Mathias & Constance, Bull. Torrey Bot. Club 69: 151. 1942.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caazapá, Central, Guairá, Paraguari.

Voucher: *F. Mereles et al.* 10098 (FCQ).

ASTERACEAE

Acanthospermum hispidum DC., Prodr. 5: 522. 1836.

Syn.: *Acanthospermum humile* DC. var. *hispidum* (DC.) Kuntze

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Central, Concepción, Cordillera, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *A. Quarti* P050 (FCQ).

Ageratum conyzoides L., Sp. Pl. 2: 839. 1753.

Syn.: *Ageratum conyzoides* L. var. *hirtum* (Lam.) DC., *A. hirsutum* Poir., *A. hirtum* Lam., *A. latifolium* Cav., *Carelia conyzoides* (L.) Kuntze

Herb.

Departmental distribution: Amambay, Caazapá, Canindeyú, Central, Cordillera, Guairá, Itapúa, San Pedro.

Voucher: *J. De Egea et al.* 1276 (FCQ).

Ambrosia elatior L., Sp. Pl. 2: 987. 1753.

Syn.: *Ambrosia artemisiifolia* L., *A. artemisiifolia* var. *elatior* (L.) Descourt., *A. chilensis* Hook. & Arn., *A. peruviana* Cabrera, hom. illeg.

Herb.

Departmental distribution: Alto Paraná, Amambay, Boquerón, Caazapá, Central, Concepción, Cordillera, Guairá, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10090 (FCQ, G).

Ambrosia tenuifolia Spreng., Syst. Veg. (ed. 16) 3: 851. 1826.

Herb.

Departmental distribution: Central, Paraguari, Presidente Hayes.

Voucher: *F. Mereles* 5263 (CTES, FCQ).

Aspilia montevidensis (Spreng.) Kuntze var. *montevidensis*, Revis. Gen. Pl. 3[3]: 129. 1898.

Syn.: *Aspilia arillata* (DC.) Griseb., *A. buphthalmiflora* (DC.) Griseb., *A. calendulacea* (DC.) Griseb., *A. montevidensis* (Spreng.) Kuntze var. *setosa* (Griseb.) Cabrera, *A. setosa* Griseb., *Leighia arillata* DC., *L. buphthalmiflora* DC., *L. calendulacea* DC., *Verbesina montevidensis* Spreng., *Wedelia montevidensis* (Spreng.) B.L.Turner

Herb.

Departmental distribution: Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1334 (BM, CTES, FCQ, G).

Aspilia silphioides Benth. & Hook. f., Gen. Pl. 2(1): 372. 1873.

Syn.: *Gymnopsis helianthoides* DC., *Leighia silphioides* Hook. & Arn., *Wedelia silphioides* (Hook. & Arn.) B.L.Turner

Herb.

Departmental distribution: Amambay, Boquerón, Central, Concepción, Cordillera, Ñeembucú, Presidente Hayes.

Voucher: *F. Mereles & S. Soria* 9953 (BM, FCQ, G).

Baccharis salicifolia (Ruiz & Pav.) Pers., Syn. Pl. 2: 425. 1807.

Syn.: *Baccharis alamanii* DC., *B. araucana* Phil., *B. pallida* Heering ex Reiche, *B. chilquilla* DC., nom. superfl., *B. coerulescens* DC., *B. confertifolia* Colla var. *confertifolia*, *B. cuervii* Phil., *B. fevillei* DC., *B. glutinosa* Pers. var. *incisa* Heering, *B. huydobriana* J.Rémy, *B. iresinoides* Kunth, *B. krausei* Heering ex Reiche, *B. lanceolata* Kunth emend. Heering, *B. linifolia* DC., hom. illeg., *B. longifolia* DC., *B. longipes* Kunze ex DC., *B. marginalis* DC., *B. marginalis* var. *araucana* (Phil.) Heering, *B. marginalis* var. *linifolia* (Phil.) Heering, *B. marginalis* var. *longipes* (Kunze ex DC.) Heering, *B. parviflora* (Ruiz & Pav.) Pers., *B. purpurascens* Heering, *P. salicifolia* (Ruiz & Pav.) F.H.Hellwig, *B. salicifolia* (Ruiz & Pav.) Pers. var. *longifolia* (DC.) Cuatrec., *B. sphaerocephala* Hook. & Arn. var. *krausei* (Heering) Malag., comb. illeg., *B. viscosa* (Ruiz & Pav.) Kuntze var. *nigricans* Kuntze, *Molina parviflora* Ruiz & Pav., *M. salicifolia* Ruiz & Pav., *M. striata* Ruiz & Pav., *Pingraea marginalis* (DC.) F.H.Hellwig

Shrub.

Departmental distribution: Alto Paraguay, Boquerón, Central, Itapúa, Presidente Hayes.

Voucher: *F. Mereles et al.* 9917 (BM, FCQ, G).

Bidens pilosa L. var. ***pilosa***, Sp. Pl. 2: 832. 1753.

Syn.: *Bidens californica* DC., *B. hispida* Kunth, *B. hirsuta* Nutt., hom. illeg., *B. leucantha* Willd. f. *discoidea* Sch.Bip., *B. leucantha* var. *pilosa* (L.) Griseb., *B. leucantha* var. *sundaica* (Blume) Hassk., *B. montaubanii* Phil., *B. pilosa* L. var. *brevifoliata* Hieron, *B. pilosa* var. *discoidea* Sch.Bip., *B. pilosa* var. *dubia* (Cass.) O.E.Schulz, *B. pilosa* var. *minor* (Blume) Sherff, *B. reflexa* Link, *B. sunaica* Blume, *B. sunaica* var. *minor* Blume, *Kerneria dubia* Cass.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Canindeyú, Central, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1236 (FCQ).

Bidens subalternans DC. var. ***subalternans***, Prodr. 5: 600. 1836.

Syn.: *Bidens quadrangularis* DC., *B. platensis* Manganaro

Herb.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Caazapá, Central, Cordillera, Guairá, Paraguari.

Voucher: *N. Soria* 5736 (FCQ, MO).

Chrysolaena cognata (Less.) Dematteis, Bol. Soc. Argent. Bot. 44(1-2): 157. 2009.

Syn.: *Cacalia cognata* (Less.) Kuntze, *Vernonia cinerascens* Sch.Bip. ex Baker, nom. nud., *V. cognata* Less., *V. senecionea* Mart. ex DC., *V. senecionea* var. *adenocarpa* DC., *V. senecionea* f. *calvata* Chodat

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Paraguari, San Pedro.

Voucher: *M. Dematteis et al.* 3138 (CTES, FCQ).

Chrysolaena platensis (Spreng.) H.Rob., Proc. Biol. Soc. Washington 101: 957. 1988.

Syn.: *Cacalia platensis* (Spreng.) Kuntze, *Conyza platensis* Spreng., *Vernonia platensis* (Spreng.) Less., *V. virens* Sch.Bip. ex Baker f. *robustior* Chodat

Subshrub.

Departmental distribution: Amambay, Concepción, Cordillera, Guairá, Misiones, Paraguari, San Pedro.

Voucher: *J. De Egea et al.* 1335 (BM, CTES, FCQ, G).

Conyza bonariensis (L.) Cronquist var. ***angustifolia*** (Cabrera) Cabrera, Man. Fl. Alrededores Buenos Aires 481. 1953.

Syn.: *Conyza linearis* DC., *Erigeron bonariensis* L. var. *angustifolius* Cabrera

Herb.

Departmental distribution: Central, Misiones.

Voucher: *F. Mereles et al.* 10176 (FCQ).

Conyza bonariensis (L.) Cronquist var. ***bonariensis***, Bull. Torrey Bot. Club 70: 632. 1943.

Syn.: *Conyza hispida* Kunth, *C. plebeja* Phil., *Erigeron bonariensis* L., *E. bonariensis* f. *grisea* Chodat & Hassl., *Marsea bonariensis* (L.) V.M.Badillo

Herb.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Caazapá, Central, Cordillera, Guairá, Paraguari, Presidente Hayes.

Voucher: *F. Mereles* 6450 (FCQ).

Conyza sumatrensis (Retz.) E.Walker var. ***leiotheca*** (S.F.Blake) Pruski & G.Sancho, *Novon* 16(1): 98–99, f. 1. 2006.

Syn.: *Conyza bilbaoana* J.Remy, *C. bonariensis* (L.) Cronquist var. *leiotheca* (S.F.Blake) Cuatrec., *C. elata* Kunth & Bouché, *C. floribunda* Kunth, *C. floribunda* var. *lacinata* Cabrera, *C. myriocephala* J.Remy, *C. sumatrensis* (Retz.) E.Walker var. *floribunda* (Kunth) J.B.Marshall, *Erigeron bilbaoanus* (J.Remy) Cabrera, *E. bonariensis* L. var. *floribundum* (Kunth) Cuatrec., *E. bonariensis* f. *glabrata* Speg., *E. bonariensis* var. *leiothecus* S.F.Blake, *E. floribundus* (Kunth) Sch.Bip., *Marsea bonariensis* (L.) V.M.Badillo var. *leiotheca* (S.F.Blake) V.M.Badillo

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Central, Guairá, Itapúa, Paraguari.

Voucher: N. Soria 2684 (FCQ, MO).

Eclipta prostrata (L.) L., *Mant. Pl. Altera* 286. 1771.

Syn.: *Eclipta alba* (L.) Hassk., *E. erecta* L., nom. illeg., *Galinsoga oblongifolia* (Hook.) DC., *Polygyne inconspicua* Phil., *Verbesina alba* L., *V. conyzoides* Trew, *V. prostrata* L., *Wiborgia oblongifolia* Hook.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Presidente Hayes, San Pedro.

Voucher: F. Mereles & J. De Egea 10129 (FCQ).

Emilia fosbergii Nicolson, *Phytologia* 32(1): 34. 1975.

Syn.: *Emilia javanica* auct. non (Burm.) C.B.Rob., *E. sagittata* auct. non (Vahl) DC.

Herb. Introduced.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Canindeyú, Central, Cordillera, Guairá, Misiones, San Pedro.

Voucher: F. Mereles & J. De Egea 10147 (FCQ).

Erechtites valerianifolius (Link ex Spreng.) DC. f. ***valerianifolius***, Prodr. 6: 295. 1838.

Syn.: *Crassocephalum valerianifolium* (Link ex Spreng.) Less., *Erechtites gardneriana* Cabrera, *E. valerianifolius* (Wolf) DC., nom. inval., *Gynura rosea* Ridl., *Senecio valerianifolius* Wolf ex Link, nom. nud., *Senecio valerianifolius* Desf., hom. illeg., *Senecio valerianifolius* Gardner, hom. illeg., *Senecio valerianifolius* Link ex Spreng., *Sonchus erythropappus* Meyen & Walp. ex Walp.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Cordillera, Guairá, Itapúa, Paraguari, San Pedro.

Voucher: *J. De Egea et al.* 1237 (FCQ).

Eupatorium inulifolium Kunth, Nov. Gen. Sp. 4(15): 85 (ed. fol.). 1818.

Shrub.

Departmental distribution: Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles* 9930 (BM, FCQ, G).

Flaveria bidentis (L.) Kuntze, Revis. Gen. Pl. 3(3): 148. 1898.

Syn.: *Ethulia bidentis* L., *Eupatorium chilense* Molina, *Flaveria bidentis* (L.) B.L.Rob., comb. superfl., *F. bonariensis* DC., *F. capitata* Juss. ex Sm., *F. chilensis* (Molina) J.F.Gmel., *F. contrayerba* (Cav.) Pers., *Milleria chiloensis* Juss., nom. nud., *M. contrayerba* Cav., *Vermifuga corymbosa* Ruiz & Pav., nom. illeg.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Concepción, Presidente Hayes.

Voucher: *F. Mereles* 5667 (CTES, FCQ).

Galinsoga parviflora Cav., Icon. 3(2): 41–42, pl. 281. 1796.

Syn.: *Adventina parviflora* Raf., *Galinsoga quinquerradiata* Ruiz & Pav., nom. superfl., *Wiborgia acmella* Roth, *W. parviflora* (Cav.) Kunth

Herb.

Departmental distribution: Amambay, Central, Guairá.

Voucher: *G. Céspedes* 422 (FCQ).

Gamochaeta americana (Mill.) Wedd., *Chlor. And.* 1: 151. 1856.

Syn.: *Gamochaeta americana* var. *alpina* Wedd., *Gamochaeta guatemalensis* (Gand.) Cabrera, *Gnaphalium americanum* Mill., *Gnaphalium consanguineum* Gaudich., *Gnaphalium guatemalense* Gand., *Gnaphalium purpureum* L. var. *americaum* (Mill.) Klatt.

Herb.

Departmental distribution: Alto Paraná, Amambay, Central, Cordillera, Presidente Hayes.
Voucher: G. Céspedes 432 (FCQ).

Gamochaeta calviceps (Fernald) Cabrera, *Bol. Soc. Argent. Bot.* 9: 368. 1961.

Syn.: *Gnaphalium calviceps* Fernald

Herb.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Central, Concepción, Cordillera, Paraguairí, San Pedro.
Voucher: J. De Egea et al. 1227 (BM, FCQ).

Gamochaeta coarctata (Willd.) Kerguélen, *Lejeunia* 120: 104. 1987.

Syn.: *Gamochaeta spicata* Cabrera, *Gnaphalium coarctatum* Willd., *Gnaphalium purpureum* L. var. *spicatum* Baker, nom. illeg., *Gnaphalium spicatum* Lam., nom. illeg.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Caazapá, Central, Cordillera, Guairá, Itapúa, San Pedro.
Voucher: J. De Egea et al. 1322 (FCQ).

Gamochaeta pensylvanica (Willd.) Cabrera, *Bol. Soc. Argent. Bot.* 9: 375. 1961.

Syn.: *Gamochaeta platensis* (Cabrera) Cabrera, *Gnaphalium pensylvanicum* Willd., *Gnaphalium peregrinum* Fernald, *Gnaphalium platense* Cabrera, *Gnaphalium purpureum* L. ssp. *pensylvanica* (Willd.) O.Bolòs & Vigo, *Gnaphalium purpureum* var. *spathulatum* Baker, *Gnaphalium spathulatum* Lam., hom. illeg.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Canindeyú, Central, Cordillera, Guairá, Paraguairí, Presidente Hayes.
Voucher: I. Basualdo 395 (FCQ).

Lepidaploa remotiflora (Rich.) H.Rob., Proc. Biol. Soc. Washington 103: 491. 1990.

Syn.: *Vernonia hirtiflora* Sch.Bip. ex Baker, *V. lithospermoides* Baker, *V. remotiflora* Rich., *V. remotiflora* var. *tricholepis* (DC.) Baker, *V. sessiliflora* Willd. ex Less., *V. tricholepis* DC.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñemebucú, Paraguairí, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1223 (BM, FCQ).

Parthenium hysterophorus L., Sp. Pl. 2: 988. 1753.

Syn.: *Argyrochaeta bipinnatifida* Cav., *Echetrosis pentasperma* Phil., *Parthenium glomeratum* Rollins, *P. lobatum* Buckley, *P. pinnatifidum* Stokes, nom. superfl., *Villanova bipinnatifida* Ortega

Herb.

Departmental distribution: Alto Paraguay, Amambay, Presidente Hayes.

Voucher: *J. De Egea et al.* 142 (BM, CTES, FCQ, G, MO).

Pluchea sagittalis (Lam.) Cabrera, Bol. Soc. Argent. Bot. 3: 36. 1949.

Syn.: *Conyza sagittalis* Lam., *Epaltes brasiliensis* DC., *Gnaphalium suaveolens* Vell., *Pluchea quitoc* DC., *P. suaveolens* (Vell.) Kuntze

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Paraguairí, Presidente Hayes.

Voucher: *F. Mereles et al.* 10048 (FCQ, G).

Praxelis clematidea (Griseb.) R.M.King & H.Rob., Phytologia 20: 194. 1970.

Syn.: *Eupatorium catarium* Veldkamp, *E. clematideum* Griseb., hom. illeg., *E. pauciflorum* auct. non Kunth, *E. urticifolium* auct. non L., *E. urticifolium* L. f. var. *clematideum* Hieron. ex Kuntze, *E. urticifolium* f. var. *nanum* Hieron. ex Kuntze

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *W.J. Hahn 1613* (MO, PY).

Senecio brasiliensis (Spreng.) Less var. ***brasiliensis***, *Linnaea* 6: 249. 1831.

Syn.: *Cineraria brasiliensis* Spreng.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Itapúa, Misiones.

Voucher: *N. Soria 2513* (CTES, MO).

Senecio grisebachii Baker var. ***grisebachii***, *Fl. Bras.* 6(3): 313. 1884.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al. 10005* (FCQ).

Senecio hieronymi Griseb., *Abh. Königl. Ges. Wiss. Göttingen* 24: 205. 1879.

Syn.: *Senecio charaguensis* Cuatrec., *S. tafiensis* Cabrera

Subshrub.

Departmental distribution: Alto Paraná, Canindeyú, Central, Guairá, Paraguari.

Voucher: *J. De Egea et al. 1331* (BM, FCQ).

Solidago chilensis Meyen var. ***chilensis***, *Reise Erde* 1: 311. 1834.

Syn.: *Aster sagei* Phil., *Solidago coquimbana* Phil., *S. floribunda* Phil., *S. laxiflora* Phil., *S. linearifolia* DC., *S. linearifolia* var. *brachypoda* Speg., *S. microglossa* DC. var. *linearifolia* (DC.) Baker, *S. parviflora* Phil., *S. recta* Phil., *S. valdiviana* Phil.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Cordillera.

Voucher: *I. Basualdo 111* (FCQ).

Solidago microglossa DC., Prodr. 5: 332. 1836.

Syn.: *Solidago chilensis* Meyen var. *megapotamica* (DC.) Cabrera, *S. microglossa* DC. var. *megapotamica* DC.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Paraguari, Presidente Hayes, San Pedro.

Voucher: *M. Ortiz 1004* (FCQ).

Soliva sessilis Ruiz & Pav., Syst. Veg. Fl. Peruv. Chil. 1: 215. 1798.

Syn.: *Gymnostyles alata* Spreng., *G. barclayana* (DC.) Steud., *G. chilensis* Spreng., *G. pterosperma* Juss., *Soliva alata* (Spreng.) DC., *S. barclayana* DC., *S. daucifolia* Nutt., *S. microloma* Phil., *S. neglecta* Cabrera, *S. pterosperma* (Juss.) Less., *S. sessilis* Ruiz & Pav. var. *barclayana* (DC.) Baker, *S. valdiviana* Phil.

Herb.

Departmental distribution: Alto Paraná, Concepción, Cordillera, Guairá, Misiones, Paraguari, San Pedro.

Voucher: *L. Pérez 448* (FCQ).

Sonchus oleraceus L., Sp. Pl. 2: 794. 1753.

Syn.: *Sonchus gracilis* Phil., *S. rivularis* Phil.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Caazapá, Canindeyú, Central, Guairá, San Pedro.

Voucher: *J. De Egea et al. 1238* (BM, FCQ).

Synedrellopsis grisebachii Hieron. & Kuntze, Revis. Gen. Pl. 3(3): 180. 1898.

Syn.: *Synedrella nodiflora* Griseb. ex Kuntze, nom. nud.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Central, Itapúa, San Pedro.

Voucher: *J. De Egea & F. Mereles 1357* (BM, CTES, FCQ, G).

Tagetes minuta L., Sp. Pl. 2: 887. 1753.

Syn.: *Tagetes bonariensis* Pers., *T. glandulifera* Schrank, *T. glandulosa* Link, *T. porophyllum* Vell.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Central, Cordillera, Paraguari, Presidente Hayes.

Voucher: A. Schinini 2401 (FCQ).

Taraxacum officinale F.H.Wigg., Prim. Fl. Holsat. 56. 1780.

Syn.: *Leontodon taraxacum* L., *L. vulgaris* Lam., nom. illeg., *Taraxacum dens-leonis* Desf., *T. subspathulatum* A.J.Richards, *T. vulgare* (Lam.) Schrank., nom. illeg.

Herb. Introduced.

Departmental distribution: Alto Paraná, Caazapá, Guairá.

Voucher: R. Degen 982 (FCQ).

****Tridax procumbens*** L., Sp. Pl. 2: 900. 1753.

Syn.: *Amellus pedunculatus* Ortega ex Willd., nom. inval., *Balbisia canescens* Pers., *B. divaricata* Cass., *B. elongata* Willd., *B. pedunculata* Ortega ex Hoffmans., nom. illeg., *Tridax procumbens* L. var. *canescens* (Pers.) DC., *T. procumbens* var. *ovatifolia* B.L.Rob. ex Greenm.

Herb.

Departmental distribution: Boquerón, Central, Concepción, San Pedro.

Voucher: F. Mereles & S. Soria 9944 (BM, FCQ, G).

Vernonanthura tweedieana (Baker) H.Rob., Phytologia 73: 74. 1992.

Syn.: *Chrysocoma arborea* Vell., *Vernonia tweedieana* Baker

Shrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Central, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: F. Mereles et al. 9907 (FCQ, G).

Vernonia incana Less., Linnaea 4: 277. 1829.

Syn.: *Cacalia incana* (Less.) Kuntze, *Vernonia inmundis* Griseb.

Herb.

Departmental distribution: Alto Paraná, Amambay, Central, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *M. Ortiz* 551 (FCQ).

BORAGINACEAE

Heliotropium leiocarpum Morong, Ann. New York Acad. Sci. 7: 168. 1893.

Syn.: *Heliotropium leiocarpum* Morong f. *albiflora* Chodat, *H. leiocarpum* f. *minor* Chodat

Subshrub.

Departmental distribution: Alto Paraná, Central, Cordillera, Paraguari, Presidente Hayes.

Voucher: *A. Krapovickas & C.L. Cristóbal* 44544 (FCQ).

BRASSICACEAE

Brassica rapa L., Sp. Pl. 2: 666. 1753.

Syn.: *Brassica campestris* L.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Boquerón, Central.

Voucher: *M. Ortiz* 283 (FCQ).

****Capsella bursa-pastoris*** (L.) Medik., Pfl.-Gatt. 85. 1792.

Syn.: *Thlaspi bursa-pastoris* L.

Herb. Introduced.

Departmental distribution: Itapúa.

Voucher: *E. Lurvey* 181 (Lurvey 1983).

Lepidium didymum L., Syst. Nat., ed. 12. 2: 433. 1767.

Syn.: *Coronopus didymus* (L.) Sm., *C. didymus* var. *macrocarpus* Muschl., *C. didymus* var. *procumbens* Muschl., *C. leptocarpus* Boelcke, *C. leptocarpus* var. *microcarpus* Boelcke, *Lepicochlea americana* Rojas Acosta, *Senebiera didyma* (L.) Pers., *S. pinnatifida* DC.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caazapá, Central, Cordillera.

Voucher: *I. Basualdo* 5223 (FCQ).

Lepidium virginicum L., Sp. Pl. 2: 645. 1753.

Herb. Introduced.

Departmental distribution: Amambay, Caaguazú, Central, Guairá, Itapúa.

Voucher: *E. Lurvey* 359 (Lurvey 1983).

Raphanus raphanistrum L., Sp. Pl. 2: 669. 1753.

Herb. Introduced.

Departmental distribution: Amambay, Cordillera, Itapúa.

Voucher: *E. Lurvey* 374 (Lurvey 1983).

Raphanus sativus L., Sp. Pl. 2: 669. 1753.

Herb. Introduced.

Departmental distribution: Amambay, Central, Cordillera, Misiones, San Pedro.

Voucher: *J. De Egea et al.* 1268 (FCQ).

CAMPANULACEAE

Lobelia xalapensis Kunth, Nov. Gen. Sp. 3: 315. 1819.

Syn.: *Dortmannia cliffortiana* Kuntze var. *xalapensis* (Kunth) Kuntze, *D. mollis* (Graham) Kuntze, *D. monticola* (Kunth) Kuntze, *D. ocimoides* (Kunze) Kuntze, *Lobelia cliffortiana* L., *L. cliffortiana* var. *xalapensis* (Kunth) A.Gray, *L. mollis* Graham, *L. monticola* Kunth, *L. ocimoides* Kunze, *L. palmaris* Willd. ex Roem. & Schult., *Rapuntium monticulum* (Kunth) C.Presl, *R. xalapense* (Kunth) C.Presl

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Paraguari, San Pedro.

Voucher: *J. De Egea et al.* 1317 (BM, FCQ).

Triodanis perfoliata (L.) Nieuwl. subsp. ***biflora*** (Ruiz & Pav.) Lammers, Novon 16(1): 72. 2006.

Syn.: *Campanula biflora* Ruiz & Pav., *C. ludoviciana* Torr. ex A.Gray, nom. nud., *C. montevidensis* Spreng., *Dysmicodon californicum* Nutt., *D. ovatum* Nutt., *Legouzia biflora* (Ruiz & Pav.) Britton, *Pentagonia biflora* (Ruiz & Pav.) Kuntze, *Specularia biflora* (Ruiz & Pav.) Fisch. & A.Gray, *S. californica* (Nutt.) Vatke, *S. ovata* (Nutt.) Vatke, *S. perfoliata* (L.) A.DC., *S. perfoliata* f. *ramosa* Arechav., *S. perfoliata* f. *rigida* Arechav., *Triodanis biflora* (Ruiz & Pav.) Greene, *T. perfoliata* (L.) Nieuwl. var. *biflora* (Ruiz & Pav.) T.R.Bradley

Herb.

Departmental distribution: Alto Paraná, Central, Guairá, Paraguari.

Voucher: *J. De Egea et al.* 1313 (FCQ).

Wahlenbergia linarioides (Lam.) A.DC., Monogr. Campan. 158. 1830.

Syn.: *Campanula arida* Kunth, *C. chilensis* Molina, *C. linarioides* Lam., *Wahlenbergia arida* (Kunth) Griseb., *W. linarioides* (Lam.) A.DC. var. *arida* (Kunth) A.DC., *W. linarioides* var. *micrantha* Phil.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Guairá, Itapúa, Ñeembucú, Paraguari.

Voucher: *F. Mereles et al.* 10088 (FCQ, G).

CARYOPHYLLACEAE

Cerastium rivulariastrum Möschl & Pedersen, Darwiniana 16(1-2): 118. 1970.

Herb.

Departmental distribution: Canindeyú, Central, Guairá, Misiones, Paraguari.

Voucher: *G. Céspedes* 435 (FCQ).

Drymaria cordata (L.) Willd. ex Roem. & Schult., Syst. Veg. (ed. 15 bis) 5: 406. 1819.

Syn.: *Drymaria cordata* (L.) Willd. ex Roem. & Schult. var. *pacifica* Mizush., *Holosteum cordatum* L.

Herb.

Departmental distribution: Central, Cordillera, Guairá, Paraguari.

Voucher: *E. Zardini & R. Velázquez* 27329 (FCQ, MO).

Paronychia communis Cambess. var. ***communis***, Fl. Bras. Merid. (quarto ed.) 2(15): 186. 1829.

Herb.

Departmental distribution: Alto Paraná, Canindeyú, Cordillera, Paraguari.

Voucher: *F. Mereles et al.* 10073 (FCQ, G).

Stellaria media (L.) Cirillo var. ***gymnocalyx*** Trautv., Acta Horti Petrop. 1: 33. 1881.

Syn.: *Stellaria glabra* Raunk.

Herb. Introduced.

Departmental distribution: Itapúa.

Voucher: *E. Lurvey* 205 (CTES).

CLEOMACEAE

Cleome aculeata L. var. ***aculeata***, Syst. Nat., ed. 12. 3: 232. 1768.

Herb.

Departmental distribution: Alto Paraguay, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes.

Voucher: *M. Ortiz* 317 (FCQ).

Cleome tucumanensis Iltis, Brittonia 12: 284. 1960.

Syn.: *Cleome flexuosa* Griseb., nom. illeg.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Central, Presidente Hayes.

Voucher: *F. Mereles & S. Soria* 9941 (FCQ, G).

COMMELINACEAE

**Commelina benghalensis* L., Sp. Pl. 1: 41. 1753.

Herb. Introduced.

Departmental distribution: Cordillera, Guairá, Paraguari, San Pedro.

Voucher: *J. De Egea et al.* 1273 (FCQ).

Commelina diffusa Burm.f. var. *diffusa*, Fl. Indica 18, pl. 7, f. 2. 1768.

Syn.: *Commelina cayennensis* Rich., *C. cayennensis* var. *pubescens* Griseb., *C. longicaulis* Jacq., *C. nudiflora* auct. non L.

Herb.

Departmental distribution: Concepción, Guairá, Misiones, Ñeembucú, Paraguari.

Voucher: *F. Mereles & J. De Egea* 10149 (FCQ, G).

Commelina diffusa Burm.f. var. *gigas* (Small) Faden, Ann. Missouri Bot. Gard. 80: 213. 1993.

Syn.: *Commelina gigas* Small

Herb.

Departmental distribution: Boquerón, Central, Cordillera, Guairá, Itapúa, Paraguari.

Voucher: *F. Mereles et al.* 9919 (FCQ, G).

Commelina erecta L. var. *angustifolia* (Michx.) Fernald, Rhodora 42: 439. 1940.

Syn.: *Commelina angustifolia* Michx., *C. virginica* L. var. *angustifolia* (Michx.) C.B.Clarke

Herb.

Departmental distribution: Boquerón, Cordillera.

Voucher: *F. Mereles & S. Soria* 9964 (FCQ, G).

Commelina erecta L. var. *erecta*, Sp. Pl. 1: 41. 1753.

Syn.: *Commelina elegans* Kunth, *C. pohliana* Seub., *C. sulcata* Willd., *C. virginica* auct. non L., *C. virginica* L. var. *australis* C.B.Clarke

Herb.

Departmental distribution: Alto Paraguay, Amambay, Canindeyú, Central, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles* 9936 (BM, FCQ, G).

Commelina platyphylla Klotzsch, Reis. Br.-Guiana 3: 897. 1849.

Syn.: *Commelina balansae* (C.B.Clarke) Herter, *C. platyphylla* var. *balansae* C.B.Clarke

Herb.

Departmental distribution: Boquerón, Caaguazú, Central, Concepción, Cordillera, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *F. Mereles & J. De Egea* 10127 (FCQ).

CONVOLVULACEAE

Ipomoea cordatotriloba Dennst. var. ***australis*** (O'Donell) D.F.Austin, *Taxon* 37(1): 185. 1988.

Syn.: *Ipomoea trichocarpa* Elliot, nom. illeg., *I. trichocarpa* Elliott var. *australis* O'Donell,

Vine.

Departmental distribution: Amambay, Caaguazú, Central, Cordillera, Guairá, Paraguari, San Pedro.

Voucher: *E. Zardini* 9984 (FCQ, MO).

Ipomoea grandifolia (Dammer) O'Donell, *Arq. Mus. Paraense* 9: 222. 1952.

Syn.: *Ipomoea triloba* auct. non L., *Jacquemontia grandifolia* Dammer

Vine.

Departmental distribution: Alto Paraguay, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, San Pedro.

Voucher: *F. Mereles & J. De Egea* 10140 (FCQ, G).

Ipomoea nil (L.) Roth, *Catal. Bot.* 1: 36. 1797.

Syn.: *Convolvulus nil* L., *C. tomentosus* Vell., *Ipomoea cuspidata* Ruiz & Pav., *I. longicuspis* Meisn., nom. illeg., *I. scabra* Forssk., *Pharbitis cuspidata* (Ruiz & Pav.) G.Don

Vine.

Departmental distribution: Boquerón, Caazapá, Canindeyú, Central, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1318 (BM, FCQ, G).

CUCURBITACEAE

Cucurbitella asperata (Gillies ex Hook. & Arn.) Walp., Repert. Bot. Syst. 6: 50. 1846.

Syn.: *Cucurbita asperata* Gillies ex Hook. & Arn., *Cucurbita urkupinana* Cárdenas, *Cucurbitella cucumifolia* (Griseb.) Cogn., *Cucurbitella duriaei* (Naudin) Cogn., *Cucurbitella integrifolia* Cogn., *Cucurbitella integrifolia* Cogn. var. *glabrior* Cogn., *Cucurbitella urkupinana* (Cárdenas) C. Jeffrey, *Prasopepon cucumifolius* Griseb., *P. durieui* Naudin, *Schizostigma asperatum* (Gillies ex Hook. & Arn.) Arn., comb. illeg.

Vine.

Departmental distribution: Alto Paraguay, Boquerón, Central, Concepción, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1226 (BM, FCQ).

CYPERACEAE

Bulbostylis capillaris (L.) Kunth ex C.B. Clarke var. ***capillaris***, Fl. Brit. India 6(19): 652. 1893.

Syn.: *Abildgaardia capillaris* (L.) Lye, *Fimbristylis capillaris* (L.) A. Gray, *Isolepis capillaris* (L.) Roem. & Schult., *Scirpus capillaris* L., *Stenophyllus capillaris* (L.) Britton

Herb.

Departmental distribution: Alto Paraguay, Caaguazú, Caazapá, Guairá, Paraguari.

Voucher: *J. De Egea et al.* 1327 (FCQ).

Cyperus aggregatus Endl., Cat. Horti Vindob. 1: 93. 1842.

Syn.: *Cyperus aggregatus* (Willd.) Endl. var. *gigas* (Lindm.) Guagl., *C. argentinus* Boeck., *C. cayennensis* (Lam.) Britton, nom. illeg., *C. cayennensis* var. *gigas* (Lindm.) Barros, *C. cayennensis* var. *umbellato-flavus* (C.B. Clarke) Barros, *C. flavomariscus* Griseb., *C. flavus* (Vahl) Nees, nom. illeg., *C. flavus* var. *aggregatus* (Willd.) Kük., *C. flavus* var. *angustatus* Kük., *C. flavus* var. *argentinus* (Boeck.) Kük. ex Osten, *C. flavus* var. *gigas* (Lindm.) Kük., *C. retrorsus* Chapm. var. *australis* (Lindm.) Kük.,

Didymia cyperomorpha Phil., *Kyllinga cayennensis* Lam., *Mariscus aggregatus* Willd., *M. cayennensis* (Lam.) Urb., *M. cylindricus* Elliot var. *australis* Lindm., *M. flavus* Vahl, *M. flavus* var. *gigas* Lindm., *C. flavus* var. *laevis* (Kunth) Kük., *M. flavus* f. *umbellato-flava* C.B. Clarke

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Canindeyú, Central, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1289 (BM, FCQ).

► ***Cyperus eragrostis*** Lam. var. ***eragrostis***, Tabl. Encycl. i. 196. 1791.

Syn.: *Cyperus compressus* Jacq., *C. declinatus* Moench, *C. eragrostis* Lam. f. *latifrons* Kük., *C. eragrostis* f. *tener* Kük., *C. monandrus* Roth, *C. vegetus* Willd., *C. vegetus* var. *obtusangulus* Kuntze

Herb.

Departmental distribution: Guairá.

Voucher: *F. Mereles & S. Soria* 9949 (FCQ, G).

Cyperus esculentus L. var. ***leptostachyus*** Boeck., Linnaea 36: 290. 1870.

Syn.: *Chlorocyperus phymatodes* (Muhl.) Palla, *Cyperus esculentus* L. var. *phymatodes* (Muhl.) Kük., *Cyperus phymatodes* Muhl.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Central, Cordillera, Itapúa.

Voucher: *J. De Egea et al.* 325 (BM, MO).

Cyperus haspan L. var. ***haspan***, Sp. Pl. 1: 45. 1753.

Syn.: *Cyperus adenophorus* Schrad., *C. americanus* (Boeck.) Palla, *C. autumnalis* (Rottb.) Vahl, *C. cayennensis* Willd. ex Link, *C. efoliatus* Boeck., *C. haspan* L. var. *adenophorus* (Schrad.) Kük., *C. haspan* var. *americanus* Boeck., *Cyperus haspan* ssp. *juncooides* (Lam.) Kük., *C. haspan* var. *riparius* (Schrad. ex Nees) Kük., *C. juncooides* Lam., *C. riparius* Schrad. ex Nees, *Scirpus autumnalis* Rottb., hom. illeg.

Herb.

Departmental distribution: Alto Paraguay, Caaguazú, Caazapá, Canindeyú, Central, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari.

Voucher: *F. Mereles & S. Soria 10201* (FCQ).

Cyperus odoratus L., Sp. Pl. 1: 46. 1753.

Syn.: *Cyperus acicularis* (Nees) Steud., *C. cephalophorus* J.Presl & C.Presl, *C. conglobatus* Link, *C. densiflorus* G.Mey., *C. engelmannii* Steud., *C. ferax* Rich., *C. ferax* var. *acicularis* (Nees) Kük., *C. ferax* var. *bulbiferus* Barros, *C. ferax* var. *conglobatus* (Link) Kük., *C. ferax* ssp. *engelmannii* (Steud.) Kük., *C. ferax* var. *maximilianii* (Schrader. ex Nees) Boeck., *C. ferax* ssp. *speciosus* (Vahl) Kük., *C. ferox* Vahl, *C. flexuosus* Vahl, *C. hamiltonii* Kunth, *C. huarmensis* (Kunth) M.C.Johnst., *C. jubaeiflorus* Rudge, *C. maximilianii* (Schrader. ex Nees) Griseb., *C. pohlianus* (Nees) Kuntze, *C. speciosus* Vahl, *Diclidium lenticulare* Schrad. ex Nees, *D. lomentaceum* Nees, *D. maximilianii* Schrad. ex Nees, *D. odoratum* Schrad. ex Nees, *D. uliginosum* Schrad. ex Nees, *Mariscus ferax* (Rich.) C.B.Clark, *M. pohlianus* Nees, *Torulinium confertum* Desv. ex Ham., *T. ferax* (Rich.) Urb., *T. odoratum* (L.) S.S.Hooper

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles & S. Soria 9965* (FCQ, G).

Cyperus rotundus L., Sp. Pl. 1: 45. 1753.

Syn.: *Chlorocyperus rotundus* (L.) Palla

Herb.

Departmental distribution: Caazapá, Cordillera, Itapúa.

Voucher: *F. Mereles et al. 9920* (FCQ).

Cyperus tenuis Sw., Prodr. 20. 1788.

Syn.: *Cyperus caracasanus* Kunth

Herb.

Departmental distribution: Caaguazú, Misiones, Paraguari.

Voucher: *F. Mereles & J. De Egea 10136* (FCQ).

Eleocharis montana (Kunth) Roem. & Schult., Syst. Veg. 2: 153. 1817.

Syn.: *Eleocharis consanguinea* Kunth, *Eleocharis montana* var. *nodulosa* (Roth) Svenson, *Eleocharis nodulosa* (Roth) Schult., *Eleocharis nodulosa* f. *trigyna* Barros, *Eleogenus nodulosus* (Roth) Nees, *Scirpus montanus* Kunth, *S. nodulosus* Roth

Herb aquatic.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: G. Céspedes & al 443 (BM, FCQ).

Rhynchospora corymbosa (L.) Britton var. ***corymbosa***, Trans. New York Acad. Sci. 11: 84. 1892.

Syn.: *Calyptrastylis fascicularis* Nees, *C. florida* (Rudge) Nees, *Dichromena corymbosa* (L.) J.F.Macbr., *Rhynchospora aurea* Vahl, *R. corymbosa* (L.) Britton var. *florida* (Rudge) Kük., *R. florida* (Rudge) Schult., *R. surinamensis* (Rottb.) Nees, *Schoenus floridus* Rudge, *Schoenus surinamensis* Rottb., *Scirpus corymbosus* L.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: G. Céspedes et al. 444 (FCQ).

EUPHORBIACEAE

Acalypha communis Müll.Arg., Linnaea 34: 23. 1865.

Syn.: *Acalypha. agrestis* Morong ex Britton, *A. apicalis* N.E.Br., *A. communis* Müll.Arg. var. *agrestis* (Morong ex Britton) Chodat, *A. communis* f. *grandifolia* Chodat & Hassl., *A. communis* var. *guaranitica* Chodat & Hassl., *A. communis* var. *hirta* (Spreng.) Müll. Arg., comb. illeg., *A. communis* var. *salicifolia* Pax & K.Hoffm., *A. communis* var. *saltensis* Pax & K.Hoffm., *A. communis* var. *tomentella* Müll.Arg., *A. communis* var. *tomentosa* Müll.Arg., *A. cordobensis* Müll.Arg., *A. cordobensis* var. *rotundata* Griseb., *A. gracilis* Griseb., hom. illeg., *A. hirta* Spreng., hom. illeg., *A. montevidensis* Klotzsch ex Pax & K.Hoffm., nom. nud., *A. paraguariensis* Chodat & Hassl., *A. variabilis* Klotzsch ex Baill. var. *angustifolia* Baill., *Ricinocarpus cordobensis* (Müll.Arg.) Kuntze.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles* 9929 (BM, CTES, FCQ, G).

Cnidoscolus albomaculatus (Pax) I.M.Johnst., Contr. Gray Herb. 68: 86. 1923.

Syn.: *Jatropha albomaculata* Pax, *J. albomaculata* var. *nana* (Chodat & Hassl.) Pax, *J. albomaculata* var. *stimulosissima* (Chodat & Hassl.) Pax, *J. albomaculata* var. *subcuneata* Pax, *J. vitifolia* Mill. f. *nana* Chodat & Hassl., *J. vitifolia* f. *stimulosissima* Chodat & Hassl.

Herb or shrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles* & *S. Soria* 10181 (FCQ).

Croton glandulosus L., Syst. Nat., ed. 10. 2: 1275. 1759.

Syn.: *Croton divaricatus* Sw., *C. glandulosus* L. var. *scordioides* (Lam.) Müll.Arg., *C. scordioides* Lam.

Herb.

Departmental distribution: Alto Paraná, Amambay, Boquerón, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari.

Voucher: *J. De Egea et al.* 1372 (FCQ).

Euphorbia heterophylla L., Sp. Pl. 1: 453. 1753.

Syn.: *Poinsettia heterophylla* (L.) Klotzsch & Garcke

Herb.

Departmental distribution: Alto Paraná, Amambay, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari.

Voucher: *F. Mereles et al.* 9921 (BM, FCQ, G).

Euphorbia hirta L. var. *hirta*, Sp. Pl. 1: 454. 1753.

Syn.: *Chamaesyce hirta* (L.) Millsp., *Euphorbia pilulifera* auct. non L., *E. pilulifera* L. var. *guaranitica* Chodat & Hassl.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Central, Itapúa, Paraguari.

Voucher: *F. Mereles et al.* 10096 (FCQ).

Euphorbia hypericifolia L., Sp. Pl. 1: 454. 1753.

Syn.: *Chamaesyce hypericifolia* (L.) Millsp., *Euphorbia boliviana* Rusby

Herb.

Departmental distribution: Alto Paraguay, Itapúa.

Voucher: *F. Mereles et al.* 9923 (FCQ, G).

Euphorbia prostrata Aiton, Hort. Kew. 2: 139. 1789.

Syn.: *Chamaesyce prostrata* (Aiton) Small

Herb.

Departmental distribution: Central, Guairá.

Voucher: *F. Mereles* 10123 (FCQ).

Euphorbia selloi (Klotzsch & Garcke) Boiss., Prodr. 15(2.1): 50. 1862.

Syn.: *Anisophyllum selloi* Klotzsch & Garcke, *Chamaesyce selloi* (Klotzsch & Garcke) Croizat, *Ch. selloi* var. *brevisemina* Croizat, *Euphorbia hassleriana* Chodat, *E. hebegyne* Pax & K.Hoffm. ex Emrich, *E. selloi* var. *setosa* auct. non Boiss., *E. setosa* (Boiss.) Müll.Arg.

Herb.

Departmental distribution: Central, Guairá.

Voucher: *F. Mereles* 9938 (FCQ).

Euphorbia serpens Kunth var. ***serpens***, Nov. Gen. Sp. 2: 52. 1817.

Syn.: *Chamaesyce serpens* (Kunth) Small

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Central, Presidente Hayes.

Voucher: *F. Mereles & S. Soria 9986* (BM, FCQ, G).

Jatropha hieronymi Kuntze, Revis. Gen. Pl. 3(2): 287. 1898.

Shrub or small tree.

Departmental distribution: Alto Paraguay, Boquerón.

Voucher: *F. Mereles 10192* (FCQ).

FABACEAE

Aeschynomene falcata (Poir.) DC. var. ***falcata***, Prodr. 2: 322. 1825.

Syn.: *Aeschynomene apoloana* Rusby, *A. falcata* (Poir.) DC. var. *paucijuga* Benth., *Hedysarum diffusum* Vell., *H. falcatum* Poir.

Herb.

Departmental distribution: Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Paraguari.

Voucher: *F. Mereles 1883* (FCQ).

Bauhinia forficata Link subsp. ***pruinosa*** (Vogel) Fortunato & Wunderlin, Darwiniana 27: 550. 1986.

Syn.: *Bauhinia candicans* Benth., *B. forficata* auct. non Link, *B. forficata* auct. non Hook. & Arn., *B. forficata* var. *candicans* (Benth.) Hassl. ex Latzina, *B. forficata* Link var. *pruinosa* (Vogel) Hassl., *B. pruinosa* Vogel, *Pauletia candicans* (Benth.) A.Schmitz, *P. pruinosa* (Vogel) A.Schmitz

Shrub or tree.

Departmental distribution: Alto Paraná, Caaguazú, Central, Cordillera, Itapúa.

Voucher: *F. Mereles et al. 9905* (FCQ, G).

Chamaecrista rotundifolia (Pers.) Greene var. ***rotundifolia***, Pittonia 4(20): 31. 1899.

Syn.: *Cassia bifoliolata* DC. ex Collad., *Cassia bifoliolata* var. *pentandra* (Raddi) Desv., *Cassia bifoliolata* var. *rotundifolia* (Pers.) Desv., comb. illeg., *Cassia fabaginifolia* Kunth, *Cassia monophylla* Vell., *Cassia pentandra* Raddi, *Cassia pentandria* Larrañaga, hom. illeg., *Cassia rotundifolia* Pers., *Cassia tenuivenosa* A.P.D.Jones., *Chamaecrista bifoliolata* (DC. ex Collad.) Greene.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Caazapá, Central, Cordillera, Guairá.

Voucher: J. De Egea et al. 1337 (BM, FCQ).

Crotalaria incana L., Sp. Pl. 2: 716. 1753.

Syn.: *Chrysocalyx schimperi* Hochst. ex A.Rich., *Crotalaria affinis* DC., *Crotalaria eriocaula* S.Schauer, *Crotalaria cubensis* DC., *Crotalaria diffusa* Vell., hom. illeg., *Crotalaria eriocaula* S.Schauer, *Crotalaria glabrescens* Andersson, hom. illeg., *Crotalaria herbacea* Schweig. ex Schrank, *Crotalaria hirta* Lag., hom. illeg., *Crotalaria incana* L. f. *microphylla* Chodat & Hassl., *Crotalaria megapotamica* Burkart, *Crotalaria montana* A.Rich., *Crotalaria picensis* Phil., *Crotalaria pubescens* Moench, *Crotalaria purpurascens* Lam., *Crotalaria radiata* Merr., *Crotalaria setifera* DC., *Lupinus rotundifolius* Sessé & Moç.

Herb or shrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1240 (FCQ).

Desmodium cuneatum Hook. & Arn., Bot. Misc. 3: 195. 1832.

Syn.: *Desmodium brevipes* Vogel, *Meibomia brevipes* (Vogel) Kuntze, *M. cuneata* (Hook. & Arn.) Kuntze

Subshrub.

Departmental distribution: Alto Paraguay, Amambay, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1338 (BM, FCQ).

Desmodium tortuosum (Sw.) DC., Prodr. 2: 332. 1825.

Syn.: *Desmodium purpureum* (Mill.) Fawc. & Rendle, hom. illeg., *Hedysarum purpureum* Mill., *H. tortuosum* Sw., *Meibomia purpurea* (Mill.) Vail, *M. tortuosa* (Sw.) Kuntze.

Subshrub.

Departmental distribution: Amambay, Caaguazú, Concepción, Itapúa, Paraguari.

Voucher: F. Mereles & F. González Parini 7837 (FCQ).

Indigofera bongardiana (Kuntze) Burkart var. ***bongardiana***, Darwiniana 4: 171. 1942.

Syn.: *Anila bongardiana* Kuntze, *Indigofera gracilis* Bong. ex Benth.

Herb.

Departmental distribution: Amambay, Caaguazú, Canindeyú, Central, Itapúa, Misiones, San Pedro.

Voucher: F. Mereles & J. De Egea 10132 (FCQ, G).

Lupinus gibertianus C.P.Sm. var. ***gibertianus***, Spec. Lupinorum 206. 1940.

Syn.: *Cytisus heptaphyllus* Vell., *Lupinus aspersus* C.P.Sm., *L. bonplandianus* C.P.Sm., *L. hasslerianus* C.P.Sm., *L. heptaphyllus* (Vell.) Hassl., *L. heptaphyllus* f. *hilarianus* Benth., *L. heptaphyllus* f. *typicus* Hassl., nom. inval., *L. hilarianus* Benth., nom. superfl., *L. propedubius* C.P.Sm., *L. sanctae-anae* C.P.Sm., *L. subumbellatus* C.P.Sm.

Herb.

Departmental distribution: Itapúa, Ñeembucú, San Pedro.

Voucher: J. De Egea et al. 1283 (FCQ).

Senna morongii (Britton) H.S.Irwin & Barneby, Mem. New York Bot. Gard. 35: 364. 1982.

Syn.: *Cassia acinacicarapa* Rusby, *C. cochabambae* Herzog, *C. morongii* Britton, *C. rojasiana* Hassl., *C. tomentosa* L. f. var. *paucijuga* Kuntze

Subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Concepción, Misiones, Paraguari, Presidente Hayes.

Voucher: F. Mereles & S. Soria 9958 (BM, FCQ, G).

Senna obtusifolia (L.) H.S.Irwin & Barneby, Mem. New York Bot. Gard. 35: 252. 1982.

Syn.: *Cassia humilis* Collad., *C. obtusifolia* L., *C. tora* L. var. *humilis* Collad., *C. toroides* Raf., *C. toroides* Roxb., nom. nud., *Diallobus falcatus* Raf., nom. illeg., *D. uniflorus* Raf., *Emelista tora* (L.) Britton & Rose, *Senna toroides* Roxb.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes.

Voucher: *J. De Egea et al.* 1312 (FCQ).

Senna occidentalis (L.) Link., Handbuch 2: 140. 1831.

Syn.: *Cassia caroliniana* Walter, *C. ciliata* Raf., *C. falcata* L., *C. foetida* Pers., nom. illeg., *C. macradena* Collad., *C. obliquifolia* Schrank, *C. occidentalis* L., *C. occidentalis* var. *aristata* Collad., *C. planisiliqua* L., *C. planisiliqua* Lam., hom. illeg., *C. plumieri* DC., *Ditremexa occidentalis* (L.) Britton & Rose ex Britton & Wilson, *Senna occidentalis* (L.) Roxb., comb. superfl.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1262 (FCQ).

Vicia epetiolearis Burkart var. *epectiolearis*, Darwiniana 14: 182. 1966.

Vine.

Departmental distribution: Central, Misiones, Presidente Hayes.

Voucher: *G. Céspedes* 439 (FCQ).

LAMIACEAE

Hyptis lappacea Benth., Labiat. Gen. Sp. 103. 1833.

Syn.: *Hyptis cinerea* Morong, *H. cinerea* var. *genuina* Briq., nom. inval., *H. cinerea* var. *stenophylla* Briq., *H. globifera* auct. non G.Mey., *H. michelii* Briq. ex Micheli, *H. trichoneura* Briq. ex Micheli, *Mesosphaerum cinereum* (Morong) Briq., *M. lappaceum* (Benth.) Kuntze, *M. trichoneurum* (Briq. ex Micheli) Briq.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *R. Degen 1434* (FCQ).

Leonotis nepetifolia (L.) R.Br., Hortus Kew. (2nd ed.) 3: 409. 1811.

Syn.: *Phlomis nepetaefolia* L.

Herb. Introduced.

Departmental distribution: Amambay, Caazapá, Central, Cordillera, Paraguari, San Pedro.

Voucher: *E. Zardini 8223* (FCQ, MO).

► ***Leonurus cardiaca*** L., Sp. Pl. 2: 584. 1753.

Herb. Introduced.

Departmental distribution: Guairá.

Voucher: *R. Degen et al. 3811* (FCQ).

Leonurus japonicus Houtt., Nat. Hist. 2(9): 366, t. 57, f. 1. 1778.

Syn.: *Leonurus sibiricus* auct. non L.

Herb. Introduced.

Departmental distribution: Alto Paraná, Caazapá, Central, Guairá, Itapúa, Paraguari.

Voucher: *R. Degen 1516* (FCQ).

Scutellaria racemosa Pers., Syn. Pl. 2(1): 136. 1806.

Syn.: *Scutellaria bonariensis* Willd. ex Benth., *S. hastata* Larrañaga, *S. heterophylla* Willd. ex Benth., *S. rumicifolia* Kunth, *S. rojasii* Briq.

Herb.

Departmental distribution: Alto Paraguay, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea 1299* (BM, FCQ).

LYTHRACEAE

Cuphea carthagenensis (Jacq.) J.F.Macbr., Publ. Field Mus. Nat. Hist., Bot. Ser. 8: 124. 1930.

Syn.: *Cuphea balsamona* Cham. & Schltdl., *Lythrum carthagenense* Jacq.

Herb or subshrub.

Departmental distribution: Amambay, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: N. Soria 3111a (FCQ).

Cuphea racemosa (L.f.) Spreng. subsp. *racemosa*, Syst. Veg. (ed. 16) 2: 455. 1825.

Syn.: *Cuphea obtusifolia* Koehne ex Bacig., *C. organifolia* Cham. & Schltdl., *C. racemosa* var. *discolor* Lourteig, *Lythrum racemosum* L.f.

Herb or subshrub.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: G. Céspedes 428 (FCQ).

Heimia salicifolia Link., Icon. Pl. Select. 63, t. 28. 1822.

Syn.: *Nesaea salicifolia* Kunth

Shrub or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: F. Mereles et al. 10012 (BM, FCQ, G).

Pleurophora saccocarpa Koehne, Bot. Jahrb. Syst. 2(5): 426. 1882.

Syn.: *Pleurophora annulosa* Koehne, *P. saccocarpa* Koehne var. *febrigii* Koehne, *P. saccocarpa* var. *glabrescens* Koehne, *P. saccocarpa* var. *hirtella* Koehne, *P. saccocarpa* var. *velutina* Koehne

Shrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Canindeyú, Central, Concepción, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles & J. De Egea 10137* (BM, FCQ, G).

MALVACEAE

Abutilon pauciflorum A.St.-Hil., Fl. Bras. Merid. 1: 206. 1827.

Syn.: *Abutilon melanocarpum* A.St.-Hil. & Naudin, *A. mollissimum* auct. non (Cav.) Sweet, *A. pauciflorum* A.St.-Hil. var. *cano-tomentosum* Hassl., *A. pauciflorum* f. *longe-corniculatum* Hassl., *A. pedunculare* auct. non Humb., Bonpl. & Kunth, *A. rugosulum* Hochr. ex Chodat & Hassl.

Shrub.

Departmental distribution: Central, Concepción, Cordillera, Guairá, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *I. Basualdo 17* (FCQ).

Corchorus hirtus L., Sp. Pl., ed. 2. 2: 747. 1762.

Syn.: *Corchorus hirtus* L. var. *cuyabensis* K.Schum, *C. hirtus* var. *orinocensis* (Kunth) K.Schum., *C. orinocensis* Kunth, *C. pilolobus* Link

Herb or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Canindeyú, Central, Concepción, Cordillera, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *M. Dematteis et al. 2927* (FCQ).

Malvastrum coromandelianum (L.) Gracke subsp. ***coromandelianum***, Bonplandia 5(18): 295. 1857.

Syn.: *Malva coromandeliana* L., *Malva tricuspidata* Aiton, *Malvastrum carpinifolium* A.Gray, *Malvastrum coromandelianum* (L.) Garcke f. *breviaristata* Hassl., *Malvastrum tricuspidatum* (Aiton) A.Gray, *Malveopsis coromandeliana* (L.) Morong

Subshrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al. 9926* (FCQ).

Melochia canescens Cristóbal, Bonplandia 9(1–2): 43. 1996.

Subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Ñeembucú, Presidente Hayes.

Voucher: *F. Mereles & S. Soria* 9947 (BM, CTES, FCQ, G).

Melochia hermannioides A.St.-Hil., Fl. Bras. Merid. 1(4): 163. 1825.

Syn.: *Melochia hermannioides* f. *heterophylla* Hassl., *M. hermannioides* var. *lacinulata* (K.Schum. & Hassl.) Hassl., *M. hermannioides* var. *lanceolata* Hassl., *M. hermannioides* f. *typica* Hassl., nom. inval., *M. lacinulata* K.Schum. & Hassl., *Melochia parvifolia* Kunth f. *roseiflora* K.Schum. & Hassl.

Herb or subshrub.

Departmental distribution: Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguarí, Presidente Hayes, San Pedro.

Voucher: *F. Mereles & J. De Egea* 10141 (FCQ, G).

Melochia ministella Cristóbal, Bonplandia 9(1–2): 46. 1996.

Subshrub.

Departmental distribution: Alto Paraguay, Concepción, Itapúa, Presidente Hayes.

Voucher: *F. Mereles et al.* 9925 (BM, FCQ, G).

Melochia pyramidata L. var. *hieronymi* K.Schum., Fl. Bras. 12(3): 35. 1886.

Syn.: *M. pyramidata* L. f. *intermedia* Hassl., *M. pyramidata* var. *pseudotomentosa* Hassl., *M. pyramidata* f. *transitoria* K.Schum. & Hassl., *Melochia tomentosa* L. var. *mattogrossensis* R.E.Fr.

Subshrub.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguarí, Presidente Hayes, San Pedro.

Voucher: *C.L. Cristóbal & A. Krapovickas* 2293 (FCQ).

Melochia pyramidata L. var. ***pyramidata***, Sp. Pl. 2: 674. 1753.

Subshrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Central, Concepción, Itapúa, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: R. Spichiger et al. RS2621 (FCQ).

Pavonia sidifolia Kunth, Nov. Gen. Sp. 5: 283. 1822.

Syn.: *Asterochlaena sidifolia* (Kunth) Hassl., *A. sidifolia* ssp. *diuretica* (A.St.-Hil.) Hassl., *A. sidifolia* var. *paraguayensis* Hassl., *Pavonia diuretica* A.St.-Hil.

Shrub or subshrub.

Departmental distribution: Alto Paraguay, Amambay, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: A. Schinini 23872 (FCQ).

Pseudabutilon callimorphum (Hochr.) R.E.Fr. var. ***callimorphum***, Kungl. Svenska Vetenskapsakad. Handl. 43(4): 105. 1908.

Syn.: *Sida callimorpha* Hochr., *Wissadula callimorpha* (Hochr.) Hassl.

Subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Concepción, Presidente Hayes.

Voucher: F. Mereles & S. Soria 9939 (BM, CTES, FCQ, G).

Sida cordifolia L., Sp. Pl. 2: 684. 1753.

Syn.: *Malvastrum cordifolium* Rojas Acosta, *Sida altheifolia* Sw., *S. cordifolia* L. var. *breviaristata* Monteiro, *S. rotundifolia* Lam.

Subshrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Paraguari, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1264 (FCQ).

Sida linifolia Cav., Diss. 1, Diss. Bot. 14 (t. 2, f. 1). 1785.

Syn.: *Sida fiebrigii* Ulbr., *S. linifolia* Juss. ex Cav. f. *flaviflora* Chodat & Hassl.

Herb.

Departmental distribution: Amambay, Caaguazú, Central, Concepción, Cordillera, Guairá, Paraguari, San Pedro.

Voucher: *F. Mereles* 3983 (FCQ).

Sida rhombifolia L., Sp. Pl. 2: 684. 1753.

Syn.: *Sida rhombifolia* L. var. *canariensis* (Willd.) Griseb., *S. rhombifolia* var. *rhomboidea* (Roxb.) Mast., *S. rhomboidea* Roxb., *S. subrhombiformis* Larrañaga

Herb or subshrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Central, Cordillera, Guairá, Itapúa, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1231(FCQ).

Sida santaremensis Monteiro, Monogr. Malv. Brasil. Fasc. I. 44. 1936.

Syn.: *Sida glaziovii* auct. non K.Schum., *S. rhombifolia* L. var. *subtomentosa* K.Schum., *S. santaremensis* Monteiro var. *krapovickasiana* Monteiro

Subshrub.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Central, Concepción, Cordillera, Guairá, Paraguari, Presidente Hayes, San Pedro.

Voucher: *N. Soria* 1234 (FCQ).

Sida spinosa L., Sp. Pl. 2: 683. 1753.

Syn.: *Sida angustifolia* Lam., *S. escobilla* Larrañaga, *S. spinosa* L. var. *angustifolia* (Lam.) Griseb.

Subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Central, Cordillera, Guairá, Paraguari, Presidente Hayes.

Voucher: *E. Bordas* 4198 (FCQ).

Sidastrum paniculatum (L.) Fryxell, Brittonia 30(4): 453. 1978.

Syn.: *Sida paniculata* L.

Subshrub.

Departmental distribution: Alto Paraguay, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *G. Schmeda* 314 (FCQ).

Triumfetta semitriloba Jacq., Enum. Syst. Pl. 22. 1760.

Syn.: *Triumfetta abutiloides* A.St.-Hil., *T. tricuspis* A.St.-Hil.

Shrub.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, San Pedro.

Voucher: *I. Basualdo* 818 (FCQ).

Waltheria indica L., Sp. Pl. 2: 673. 1753.

Syn.: *Waltheria americana* L., *W. americana* var. *indica* (L.) K.Schum.

Subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: *I. Basualdo* 179 (FCQ).

Wissadula densiflora R.E.Fr. var. *densiflora*, Kungl. Svenska Vetenskapsakad. Handl. 43(4): 64, pl. 4, 6. 1908.

Subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Presidente Hayes.

Voucher: *F. Mereles & S. Soria* 9948 (BM, FCQ, G).

Wissadula subpeltata (Kuntze) R.E.Fr., Kungl. Svenska Vetenskapsakad. Handl. 43(4): 56, pl. 5, 6, 7. 1908.

Syn.: *Abutilon amplissimum* (L.) Kuntze var. *subpeltatum* Kuntze, *Wissadula amplissima* auct. non (L.) R.E.Fr.

Shrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Concepción, Cordillera, Guairá, Paraguari, Presidente Hayes.

Voucher: *M. Dematteis et al.* 2788 (FCQ).

MOLLUGINACEAE

Mollugo verticillata L., Sp. Pl. 1: 89. 1753.

Syn.: *Mollugo arenaria* Kunth

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caazapá, Central, Concepción, Cordillera, Paraguari, Presidente Hayes.

Voucher: *G. Céspedes* 424 (FCQ).

MORACEAE

Dorstenia brasiliensis Lam., Encycl. 2(1): 317. 1786.

Syn.: *D. brasiliensis* Lam. f. *balansae* Chodat, *D. brasiliensis* var. *guaranitica* Chodat, hom. illeg., *D. brasiliensis* var. *major* Chodat & Hassl., *D. brasiliensis* var. *palustris* Hassl., *D. brasiliensis* var. *tomentosa* (Fisch. & C.A.Mey.) Hassl., *D. brasiliensis* var. *tubicina* (Ruiz & Pav.) Chodat & Vischer *D. brasiliensis* var. *typica* Hassl., nom. inval., *D. montevidensis* Field & Gardner, *Dorstenia schulzii* Carauta, C.Valente & Dunn de Araujo, *D. tomentosa* Fisch. & C.A.Mey., *D. tubicina* Ruiz & Pav., *D. tubicina* var. *genuina* Hassl., nom. inval., *D. tubicina* f. *major* Hassl., *D. tubicina* var. *opifera* (Mart.) Hassl. *D. tubicina* f. *subexcentrica* Hassl., *D. tubicina* f. *typica* Hassl., nom. inval.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Central, Cordillera, Guairá, Ñeembucú, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1255 (FCQ).

NYCTAGINACEAE

Boerhavia diffusa L. var. *diffusa*, Sp. Pl. 1: 3. 1753.

Syn.: *Boerhavia coccinea* Mill. var. *paniculata* (Rich.) Moscoso, *B. paniculata* Rich.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Boquerón, Caazapá, Central, Guairá, Presidente Hayes.

Voucher: F. Mereles & S. Soria 9985 (BM, FCQ, G).

Boerhavia diffusa L. var. *leiocarpa* (Heimerl) C.D.Adams, Mitt. Bot. Staatssamml. München 8: 115. 1970.

Syn.: *Boerhavia ciliato-bracteata* Heimerl, *B. coccinea* Mill. var. *leiocarpa* (Heimerl) Standl., *B. diffusa* L. var. *paniculata* D.Parodi, nom. nud., *B. friesii* Heimerl, *B. paniculata* Rich. var. *guaranitica* Heimerl, *B. paniculata* var. *leiocarpa* Heimerl, *B. paniculata* f. *leiocarpa* Heimerl

Herb. Introduced.

Departmental distribution: Alto Paraguay, Cordillera, Presidente Hayes.

Voucher: F. Mereles & S. Soria 10184 (FCQ).

ONAGRACEAE

Ludwigia lagunae (Morong) H.Hara, J. Jap. Bot. 28: 292. 1953.

Syn.: *Jussiaea brachycarpa* Lam. ssp. *epilobioides* (Chodat & Hassl.) Hassl., *J. brachycarpa* var. *genuina* Hassl., nom. inval., *J. brachycarpa* var. *grandiflora* Hassl., *J. brachycarpa* var. *paraguayensis* (Chodat) Hassl., *J. brachycarpa* var. *parviflora* (Chodat & Hassl.) Hassl., *J. brachycarpa* var. *puberula* Hassl., *J. brachycarpa* Micheli, hom. illeg., *J. epilobioides* Chodat & Hassl., *J. epilobioides* var. *parviflora* Chodat & Hassl., *J. lagunae* Morong, *J. lagunae* var. *paraguayensis* (Chodat) Munz, *J. lagunae* var. *typica* Munz, nom. inval., *J. leveilleana* Bertoni, *J. paraguayensis* Chodat, *J. suffruticosa* L. var. *epilobioides* (Chodat & Hassl.) Bertoni, *J. suffruticosa* var. *paraguayensis* (Chodat) Bertoni, *J. suffruticosa* var. *parviflora* (Chodat & Hassl.) Bertoni

Herb or subshrub.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: F. Mereles & J. De Egea 10151 (FCQ, G).

OXALIDACEAE

Oxalis conorrhiza Jacq., *Monographia, Iconibus Illustrata* 26. 1794.

Syn.: *Acetosella caespitosa* (A.St.-Hil.) Kuntze, *A. chrysantha* (Progel) Kuntze, *A. cineracea* (A.St.-Hil.) Kuntze, *A. commersonii* (Pers.) Kuntze, *A. conorrhiza* (Jacq.) Kuntze, *A. megapotamica* (Spreng.) Kuntze, *Oxalis andicola* Gillies ex Hook. & Arn., *O. andicola* var. *wallichiana* Gillies ex Hook. & Arn., *O. brevipes* Fredr., *O. caespitosa* A.St.-Hil., *O. chrysantha* Progel, *O. chrysantha* var. *pusilla* Progel, *O. cineracea* A.St.-Hil., *O. commersonii* Pers., *O. conorrhiza* Larrañaga, *O. cordobensis* R.Knuth, *O. cordobensis* var. *humilior* R.Knuth, *O. corniculata* L. var. *serpens* R.Knuth, *O. hassleriana* Chodat, *O. linneaformis* R. Knuth, *O. megapotamica* Spreng., *O. repens* Thunb. f. *uniflora* Hieron. & Lorentz ex R.Knuth, nom. nud., *O. sexenata* Savigny, *O. sternbergii* auct. non Zucc., *Xanthoxalis chrysantha* (Progel) Holub, *X. commersonii* (Pers.) Holub, *X. cordobensis* (R.Knuth) Holub

Herb.

Departmental distribution: Alto Paraná, Alto Paraguay, Amambay, Caaguazú, Central, Concepción, Cordillera, Misiones, Presidente Hayes.

Voucher: *F. Mereles et al.* 8100 (FCQ).

Oxalis corniculata L. var. *corniculata.*, *Sp. Pl.* 1: 435. 1753.

Syn.: *Acetosella corniculata* (L.) Kuntze, *A. corniculata* var. *repens* (Thunb.) Kuntze, *Oxalis steudeliana* R.Knuth, *Xanthoxalis corniculata* (L.) Small

Herb.

Departmental distribution: Alto Paraná, Central, Cordillera, Guairá.

Voucher: *E. Zardini* 23445 (AS, MO).

Oxalis paludosa A.St.-Hil., *Fl. Bras. Merid.* 1: 121. 1825.

Syn.: *Acetosella montevidensis* (Progel) Kuntze, *A. paludosa* (A.St.-Hil.) Kuntze, *Oxalis corrientesensis* R.Knuth, *O. duricaulis* R.Knuth, *O. montevidensis* Progel

Herb.

Departmental distribution: Central, Cordillera, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *G. Céspedes* 438 (FCQ).

PASSIFLORACEAE

Turnera grandidentata (Urb.) Arbo, Candollea 40(1): 176. 1985.

Syn.: *Turnera ulmifolia* L. var. *elegans* auct. non (Otto) Urb., *T. ulmifolia* L. var. *grandidentata* Urb.

Herb. Endemic.

Departmental distribution: Caaguazú, Central, Concepción, Cordillera, Misiones, Paraguari, San Pedro.

Voucher: F. González & M. J. López 554 (FCQ).

PHYLLANTHACEAE

Phyllanthus niruri L., Sp. Pl. 2: 981. 1753.

Syn.: *Phyllanthus lathyroides* Kunth, *P. lathyroides* f. *rosellus* Müll.Arg., *P. niruri* L. ssp. *lathyroides* (Kunth) G.L.Webster, *P. microphyllus* Mart., *P. niruri* f. *microphyllus* (Müll.Arg.) G.L.Webster, *P. rosellus* (Müll.Arg.) Müll.Arg.

Herb.

Departmental distribution: Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Ñeembucú, Paraguari.

Voucher: E. Zardini et al. 2421 (FCQ, MO).

Phyllanthus orbiculatus Rich., Actes Soc. Hist. Nat. Paris 1:113. 1792.

Syn.: *Orbicularia orbiculata* (Rich.) Moldenke

Herb.

Departmental distribution: Alto Paraná, Amambay, Canindeyú, Central, Concepción, Cordillera, Guairá, Paraguari.

Voucher: E. Zardini & R. Degen 3767 (FCQ, MO).

PLANTAGINACEAE

Plantago tomentosa Lam. ssp. *tomentosa*, Tabl. Encycl. 1(2): 340. 1792.

Syn.: *Plantago achalensis* Pilg., *P. achalensis* var. *hirtula* Pilg., *P. achalensis* f. *minor* Pilg., *P. affinis* Decne., *P. arechavaletai* Pilg., *P. bicallosa* Decne. var. *hirsutior* Pilg., *P.*

grisebachii Hieron., *P. hypolasia* Pilg., *P. hypoleuca* Pilg., *P. oreades* Decne. var. *lanuginosa* Griseb., *P. paralias* Decne., *P. paralias* var. *achalensis* (Pilg.) Pilg., *P. paralias* ssp. *affinis* (Decne.) Pilg., *P. paralias* var. *brevifolia* Pilg., *P. paralias* var. *cordobensis* (Pilg.) Pilg., *P. paralias* ssp. *dasystachys* (Pilg.) Pilg., *P. paralias* ssp. *euparalias* Pilg., nom. inval., *P. paralias* var. *glabrescens* (Pilg.) Pilg., *P. paralias* ssp. *grisebachii* (Hieron.) Pilg., *P. paralias* ssp. *hypolasia* (Pilg.) Pilg., *P. paralias* var. *lasiophylla* (Pilg.) Pilg., *P. paralias* ssp. *leiocalyx* (Pilg.) Pilg., *P. paralias* var. *mollior* (Pilg.) Pilg., *P. paralias* ssp. *petiolata* (Pilg.) Pilg., *P. paralias* var. *saxicola* (Pilg.) Pilg., *P. paralias* ssp. *schlechtendaliana* (Pilg.) Pilg., *P. paralias* ssp. *selloana* (Pilg.) Pilg., *P. tomentosa* var. *achalensis* Pilg., *P. tomentosa* ssp. *balansai* Pilg., *P. tomentosa* var. *brevifolia* Pilg., *P. tomentosa* var. *cordobensis* Pilg., *P. tomentosa* ssp. *dasystachys* Pilg., *P. tomentosa* var. *glabrescens* Schmidt, *P. tomentosa* Lam. ssp. *grisebachii* (Hieron.) Pilg., *P. tomentosa* ssp. *hypolasia* (Pilg.) Pilg., *P. tomentosa* var. *lasiophylla* Pilg., *P. tomentosa* ssp. *leiocalyx* Pilg., *P. tomentosa* var. *mollior* Pilg., *P. tomentosa* ssp. *paralias* (Decne.) Pilg., *P. tomentosa* ssp. *petiolata* Pilg., *P. tomentosa* var. *saxicola* Pilg., *P. tomentosa* ssp. *schlechtendaliana* Pilg., *P. tomentosa* ssp. *selloana* Pilg.

Herb.

Departmental distribution: Alto Paraguay, Caaguazú, Caazapá, Canindeyú, Central, Cordillera, Guairá, Ñeembucú, Paraguari, Presidente Hayes, San Pedro
Voucher: R. Degen et al. 4348 (FCQ).

Scoparia dulcis L., Sp. Pl. 1: 116. 1753.

Syn.: *Capraria dulcis* (L.) Kuntze, *Scoparia dulcis* L. var. *tenuifolia* Griseb., *S. nudicaulis* Chodat & Hassl., *S. procumbens* Jacq., *S. purpurea* Ridl.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.
Voucher: F. Mereles et al. 10072 (FCQ).

Scoparia ericacea Cham. & Schltdl., Linnaea 2: 604. 1827.

Syn.: *Capraria ericacea* (Cham. & Schltdl.) Kuntze, *Scoparia divaricata* R.E.Fr., *S. plebeja* Cham. & Schltdl.

Herb or subshrub.

Departmental distribution: Alto Paraná, Cordillera, Presidente Hayes, San Pedro.
Voucher: F. Mereles et al. 10071 (FCQ).

Stemodia verticillata (Mill.) Hassl., Trab. Mus. Farmacol. 21: 110. 1909.

Syn.: *Capraria humilis* Sol., *Erinus verticillatus* Mill., *Lendneria humilis* (Sol.) Minod, *L. verticillata* (Mill.) Britton, *Stemodia arenaria* Kunth, *Stemodia humilis* (Sol.) G. Dawson, *Stemodia macrotricha* Colla, *Stemodia parviflora* W.T.Aiton, *Stemodiacra verticillata* (Mill.) Kuntze

Herb.

Departmental distribution: Caazapá, Canindeyú, Cordillera, Guairá, Ñeembucú, San Pedro.

Voucher: *J. De Egea et al.* 1220 (BM, FCQ).

POACEAE

Andropogon bicornis L., Sp. Pl. 2: 1046. 1753.

Syn.: *Andropogon bicornis* L. var. *absconditus* Hack., *A. bicornis* var. *burchellii* Hack., *A. bicornis* var. *gracillimus* Hack., *A. bicornis* var. *virginicoides* Hack.

Herb.

Departmental distribution: Alto Paraná, Amambay, Canindeyú, Central, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10179 (FCQ, G).

► ***Avena sativa*** L. subsp. ***sativa***, Sp.Pl. 1: 79. 1753.

Syn.: *Avena fatua* L. f. *glaberrima* Thell., *A. fatua* ssp. *sativa* (L.) Thell., *A. sativa* L. var. *glaberrima* (Thell.) Parodi

Herb. Introduced.

Departmental distribution: Alto Paraná.

Voucher: *F. Mereles et al.* 10074 (FCQ).

Cenchrus ciliaris L., Mant. Pl. 2: 302. 1771.

Syn.: *Pennisetum cenchroides* Rich. ex Pers., nom. illeg., *P. ciliare* (L.) Link

Herb. Introduced.

Departmental distribution: Alto Paraguay, Boquerón, Guairá, Presidente Hayes.

Voucher: *F. Mereles & S. Soria* 9969 (FCQ, G).

Cenchrus echinatus L., Sp. Pl. 2: 1050. 1753.

Syn.: *Cenchrus crinitus* Mez, *C. echinatus* Cav., nom. inval.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1293 (FCQ).

Cenchrus purpureus (Schumach.) Morrone, Ann. Bot. (Oxford) 106(1): 129. 2010.

Syn.: *Pennisetum purpureum* Schumach.

Herb. Introduced.

Departmental distribution: Alto Paraná, Canindeyú, Central, Paraguari.

Voucher: *F. Mereles et al.* 10083 (BM, FCQ, G).

Chloris virgata Sw., Fl. Ind. Occid. 1: 203. 1797.

Syn.: *Chloris compressa* DC., *C. elegans* Kunth

Herb.

Departmental distribution: Alto Paraguay, Boquerón.

Voucher: *F. Mereles & S. Soria* 10195 (FCQ).

Cynodon dactylon (L.) Pers. var. *dactylon*, Syn. Pl. 1: 85. 1805.

Syn.: *Capriola dactylon* (L.) Kuntze, *Cynodon aristiglumis* Caro & E.A.Sánchez, *Cynodon aristulatus* Caro & E.A.Sánchez, *Cynodon erectus* J.Presl., *Cynodon pascurus* Nees, *Panicum dactyon* L.

Herb. Introduced.

Departmental distribution: Alto Paraná, Cordillera, Guairá, Itapúa, San Pedro.

Voucher: *J. De Egea et al.* 1304 (FCQ).

Cynodon dactylon (L.) Pers. var. *longiglumis* Caro & E.A.Sánchez, Kurtziana 5: 210, f. 2G. 1969.

Herb.

Departmental distribution: Itapúa, San Pedro.

Voucher: *J. De Egea et al.* 1282 (FCQ).

Digitaria aequiglumis (Hack. & Arechav.) Parodi var. ***aequiglumis***, Revista Fac. Agron. Veterin. 4: 47. 1922.

Syn.: *Digitaria campestris* Henrard, *D. chillanensis* Phil. ex Henrard, nom. nud., *Panicum aequiglume* Hack. & Arechav., *P. debile* Phil., nom. illeg., *P. debile* Desf. var. *aequiglume* (Hack. & Arechav.) Hack., *P. ramosum* Arechav., *P. tridactylum* Phil., hom. illeg., *Syntherisma aequiglumis* (Hack. & Arechav.) Hitchc.

Herb.

Departmental distribution: Alto Paraná, Central, Itapúa, Presidente Hayes.

Voucher: *C.V.M. Pavetti* 10974 (Zuloaga et al. 1994).

Digitaria balansae Henrard, Meded. Rijks-Herb. 61: 2. 1930.

Herb.

Departmental distribution: Alto Paraná, Caaguazú, Caazapá, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes.

Voucher: *T. Rojas* 11188 (AS, MO).

Digitaria bicornis (Lam.) Roem. & Schult., Syst. Veg. (ed. 15 bis) 2: 470. 1817.

Syn.: *Paspalum bicornis* Lam., *Panicum bicornis* (Lam.) Kunth, *Panicum glaucescens* Nees, hom. illeg.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Central, Concepción, Cordillera, Itapúa, Misiones, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 9918 (FCQ).

Digitaria ciliaris (Retz.) Koeler, Descr. Gram. 27. 1802.

Syn.: *Digitaria abortiva* Reeder, *D. adscendens* (Kunth) Henrard, *D. marginata* Link, *D. tarapacana* Phil., *Panicum adscendes* Kunth, *P. ciliare* Retz., *P. sanguinale* L. var. *ciliare* (Retz.) Vasey

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10069 (FCQ).

Digitaria horizontalis Willd., Enum. Pl. 92. 1809.

Syn.: *Panicum horizontale* (Willd.) G.Mey., *P. oxyanthum* Steud., *P. sanguinale* L. var. *horizontale* (Willd.) Schweinf.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Presidente Hayes, San Pedro.

Voucher: *W.J. Hahn* 2076 (MO, PY).

Digitaria insularis (L.) Fedde, Bot. Jahresber. 31(1): 778. 1904.

Syn.: *Acicarpa sacchariflora* Raddi, nom. illeg., *Andropogon insulare* L., *Digitaria insularis* (L.) Mez ex Ekman, comb. superfl., *Panicum insulare* (L.) G.Mey., *P. insulare* var. *typicum* Hack., nom. inval., *P. lanatum* Rottb., nom. superfl., *P. leucophaeum* Kunth, *Milium villosum* Sw., nom. superfl., *Trichachne insularis* (L.) Nees, *Tricholaena insularis* (L.) Griseb., *Syntherisma insularis* (L.) Millsp., *Valota insularis* (L.) Chase.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Central, Cordillera, Guairá, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles & S. Soria* 9989 (BM, FCQ, G).

Echinochloa colona (L.) Link., Hort. Berol. 2: 209. 1833.

Syn.: *Echinochloa colona* (L.) Link f. *zonalis* (Guss.) Wiegand, *Panicum colonum* L., *P. colonum* f. *maculatum* Arechav., *Oplismenus colonus* (L.) Kunth, *O. muticus* Phil.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Presidente Hayes.

Voucher: *F. Mereles et al.* 10165 (BM, FCQ, G).

Echinochloa crus-galli (L.) P.Beauv. var. ***crus-galli***, Ess. Agrostogr. 161 (53, 169). 1812.

Syn.: *Panicum crus-galli* L.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Central, Cordillera, Presidente Hayes.

Voucher: F. Mereles & L. Ramella 2925 (FCQ).

Echinochloa crus-pavonis (Kunth) Schult., Mant. 2: 269. 1824.

Syn.: *Echinochloa crus-galli* (L.) P.Beauv. var. *crus-pavonis* (Kunth) Hitchc., *Oplismenus crus-pavonis* Kunth, *Panicum crus-galli* L. var. *sabulicola* (Nees) Trin.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Presidente Hayes.

Voucher: F. Mereles & J. De Egea 10135 (BM, FCQ, G).

Echinochloa oryzoides (Ard.) Fritsch, Verh. K.K. Zool.-Bot. Ges. Wien 41: 742. 1891.

Syn.: *Panicum crus-galli* L. var. *grandiflorum* Döll, *P. oryzoides* Ard.

Herb. Introduced.

Departmental distribution: Cordillera.

Voucher: E. Lurvey 60 (Zuloaga et al. 1994).

Echinochloa polystachya (Kunth) Hitchc. var. ***spectabilis*** (Nees) Mart.Crov., Revista Argent. Agron. 9: 318. 1942.

Syn.: *Echinochloa spectabilis* (Nees ex Trin.) Link, *Panicum spectabile* Nees ex Trin., *Pseudoechinolaena spectabilis* (Nees ex Trin.) Herter

Herb.

Departmental distribution: Alto Paraguay, Central, Cordillera, Guairá, Ñeembucú, Presidente Hayes.

Voucher: J. De Egea et al. 1311 (FCQ).

Eleusine indica (L.) Gaertn., *Fruct. Sem. Pl.* 1: 8. 1788.

Syn.: *Cynosurus indicus* L.

Herb. Introduced.

Departmental distribution: Amambay, Caazapá, Central, Guairá, Itapúa, Misiones.

Voucher: *F. Mereles et al.* 10162 (FCQ, G).

Eleusine tristachya (Lam.) Lam., *Tabl. Encycl.* 1(2): 203. 1792.

Syn.: *Cynosurus tristachyos* Lam., *Eleusine indica* (L.) Gaertn. var. *condensata* Döll, *Eleusine oligostachya* Link, *E. tristachya* (Lam.) Kunth, comb. superfl.

Herb.

Departmental distribution: Alto Paraná, Central, Guairá, Itapúa, Misiones, Ñembucú, Misiones, Paraguairí, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1292 (FCQ).

Eragrostis airoides Nees, *Fl. Bras. Enum. Pl.* 2(1): 509. 1829.

Syn.: *Agrosticula brasiliensis* (Raddi) Herter, *Aira brasiliensis* Raddi, *Airopsis millegrana* Griseb., *Eragrostis triflora* Ekman, *Poa airoides* (Nees) Kunth, hom. illeg., *Sporobolus brasiliensis* (Raddi) Hack.

Herb.

Departmental distribution: Alto Paraná, Amambay, Central, Guairá, Itapúa, Misiones, Paraguairí, Presidente Hayes, San Pedro.

Voucher: *G. Céspedes et al.* 440 (FCQ).

Eragrostis bahiensis Schrad., *Mant.* 2: 318. 1824.

Syn.: *Eragrostis atrovirens* auct. non (Desf.) Trin., *E. bahiensis* Schrad. ex Schult. var. *contracta* Döll, *E. bahiensis* var. *laxiuscula* Döll, *E. bahiensis* f. *riparia* Burkart, *E. blepharophylla* Jedwabn., *E. expansa* Link, *E. firma* Trin., *E. macra* Jedwabn., *E. microstachya* (Link) Link, *E. pilosa* (L.) P.Beauv. var. *bahiensis* (Schrad. ex Schult.) Kuntze, *E. psammodes* Trin., *E. psammodes* var. *microstachya* (Link) Döll, *E. squamata* auct. non (Lam.) Steud., *Poa expansa* (Link) Kunth, *P. microstachya* Link, *P. psammodes* (Trin.) Kunth.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Central, Concepción, Cordillera, Guairá, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: *G. Céspedes et al.* 448 (FCQ).

Eragrostis lugens Nees, Fl. Bras. Enum. Pl. 2(1): 507. 1829.

Syn.: *Eragrostis flaccida* Lindm., *E. lugens* Nees ssp. *flaccida* (Lindm.) Hack., *E. lugens* var. *glabrata* Döll, *E. lugens* f. *pallida* Hack., *E. pilosa* (L.) P.Beauv. var. *lugens* (Nees) Griseb., *Poa lugens* (Nees) Kunth

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Central, Concepción, Cordillera, Guairá, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *G. Céspedes* 437 (FCQ).

Eragrostis pilosa (L.) P.Beauv., Ess. Agrostogr. 71 (162, 175). 1812.

Syn.: *Eragrostis damiensiana* (Bonnet) Thell., *E. damiensiana* var. *condensata* (Hack.) Thell., *E. gracilis* Schrad., *E. multicaulis* Steud., *E. peregrina* Wiegand, *E. pilosa* (L.) P.Beauv. var. *condensata* Hack., *E. pilosa* ssp. *damiensiana* (Bonnet) Thell., *E. pilosa* var. *damiensiana* Bonnet, *E. verticillata* (Cav.) P.Beauv., *Poa pilosa* L.

Herb. Introduced.

Departmental distribution: Alto Paraná, Central, Cordillera.

Voucher: *M. Ortiz* 2 (FCQ).

Hymenachne amplexicaulis (Rudge) Nees, Fl. Bras. Enum. Pl. 2(1): 276. 1829.

Syn.: *Agrostis monostachya* Poir., *Panicum amplexicaule* Rudge

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10180 (FCQ).

Leptochloa virgata (L.) P.Beauv., Ess. Agrostogr. 71 (161, 166). 1812.

Syn.: *Cynodon domingense* (Jacq.) Raspail, *Cynodon virgatus* (L.) Raspail, *Cynosurus dominguensis* Jacq., *Cynosurus virgatus* L., *Eleusine barbata* Desv., *E. domingensis* (Jacq.) Pers., *E. unioloides* Willd. ex Steud., nom. inval., *E. virgata* (L.) Pers., *Diplachne domingensis* (Jacq.) Chapm., *Festuca domingensis* (Jacq.) Lam., *F. virgata* (L.) Lam., *Leptochloa barbata* (Desv.) Parodi ex Nicora, *Leptochloa domingensis* (Jacq.) Trin., *Leptochloa mutica* Steud., *Leptochloa procera* Nees, *Leptochloa virgata* (Jacq.) Chapm. var. *domingensis* (Jacq.) Link ex Griseb., *Leptochloa virgata* (L.) P.Beauv. var. *mutica* (Steud.) Döll, *Leptochloa virgata* (L.) P.Beauv. var. *puberula* Hack, *Lepstostachys domingensis* (Jacq.) G.Mey. *Rabdochloa domingensis* (Jacq.) P.Beauv.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes, San Pedro.

Voucher: D.R. Brunner 1219 (MO, PY).

Megathyrsus maximus (Jacq.) B.K.Simon & S.W.L.Jacob var. *maximus*, Austrobaileya 6(3): 572. 2003.

Syn.: *Panicum maximum* Jacq., *Urochloa maxima* (Jacq.) R.D.Webster

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caazapá, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes, San Pedro.

Voucher: R. Degen 1518 (FCQ).

Melinis repens (Willd.) Zizka, Biblioth. Bot. 138: 55. 1988.

Syn.: *Rhynchelytrum repens* (Willd.) C.E.Hubb., *R. roseum* (Nees) Stapf & C.E.Hubb., *Saccharum repens* Willd., *Tricholaena repens* (Willd.) Hitchc.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: J. De Egea et al. 1271 (FCQ).

Panicum bergii Arechav. var. ***bergii***, Anales Mus. Nac. Montevideo 1: 147. 1894.

Syn.: *Panicum bergii* Arechav. f. *convoluta* R.A.Palacios, *P. burkartii* Zuloaga, *P. pilcomayense* Hack.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Central, Concepción, Misiones, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *F. Mereles et al.* 10085 (FCQ, G).

Paspalum acuminatum Raddi, Agrostogr. Bras. 25. 1823.

Syn.: *Paspalum serratum* Hitchc. & Chase

Herb.

Departmental distribution: Amambay, Caazapá, Central, Concepción, Cordillera, Itapúa.

Voucher: *A. Schinini* 6282 (CTES, G).

Paspalum alnum Chase, J. Wash. Acad. Sci. 23(3): 137, f. 1. 1933.

Syn.: *Paspalum hexastachyum* Parodi, *P. ovale* Nees ex Steud. var. *apiculatum* Hack.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Central, Cordillera, Misiones, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *M. Peña-Chocarro et al.* 1669 (FCQ).

Paspalum chaseanum Parodi, J. Wash. Acad. Sci. 23: 137. 1933.

Herb.

Departmental distribution: Alto Paraguay, Boquerón.

Voucher: *F. Mereles & R. Degen* 5885 (FCQ).

Paspalum conjugatum P.J.Bergius, Acta Helv. Phys.-Math. 7: 129 (130; t. 8). 1772.

Syn.: *Paspalum renggeri* Steud.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Paraguari, San Pedro.
Voucher: *O. Morrone & J. Pensiero 133* (FCQ).

Paspalum plicatulum Michx., Fl. Bor.-Amer. 1: 45. 1803.

Syn.: *Panicum plicatulum* (Michx.) Kuntze, *Paspalum lenticulare* Kunth f. *intumescens* (Döll) Killeen, *Paspalum montevidense* Spreng., *Paspalum plicatulum* Michx. var. *genuinum* Parodi, nom. inval., *Paspalum plicatulum* var. *glabrum* Arechav., *Paspalum plicatulum* var. *intumescens* Döll, *Paspalum plicatulum* var. *longipilum* Hack., *P. plicatulum* ssp. *montevidense* (Spreng.) Roseng., B.R.Arrill. & Izag., *Paspalum plicatulum* var. *villosissimum* Pilg., *P. ramosum* Swallen

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.
Voucher: *J. De Egea et al. 1308* (FCQ).

Paspalum umbrosum Trin., Mém. Acad. Imp. Sci. St.-Petersbourg, Sér. 6, Sci. Math. 1: 153. 1834.

Syn.: *Paspalum densiflorum* Döll, *P. maritimum* auct. non Trin., *P. paniculatum* L. ssp. *umbrosum* (Trin.) Roseng., B.R.Arrill. & Izag.

Herb.

Departmental distribution: Alto Paraná, Caaguazú, Caazapá, Central, Cordillera, Guairá, Itapúa, Misiones, Paraguari, San Pedro.
Voucher: *F. Mereles et al. 10093* (FCQ).

Paspalum urvillei Steud., Syn. Pl. Glumac. 1(1): 24. 1853.

Syn.: *Paspalum larrañagai* Arechav.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, San Pedro.
Voucher: *E. Lurvey 72* (Zuloaga et al. 2014).

Paspalum wrightii Hitchc. & Chase, Contr. U.S. Natl. Herb. 18: 310. 1917.

Syn.: *Paspalum hydrophilum* Henrard, *P. plicatulum* Michx. var. *multinode* Hack, *P. virgatum* L. var. *subplicatum* Hack

Herb.

Departmental distribution: Alto Paraguay, Central, Ñeembucú, Presidente Hayes.

Voucher: *J.R. Ramírez 132* (CTES).

Setaria parviflora (Poir.) Kerguélen var. *parviflora*, Lejeunia 120: 161. 1987.

Syn.: For full list of synonyms see Pensiero (2003).

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al. 10100* (FCQ).

Setaria scandens Schrad., Mant. 2: 279. 1824.

Syn.: *Chaetochloa scandens* (Schrad.) Scribn., *Panicum scandens* (Schrad.) Trin., *P. scandens* var. *grandiflorum* Döll, *Panicum scandens* var. *longiseta* Döll, *P. scandens* var. *vulgare* Döll, *Setaria scandens* Schrad. ex Schult. var. *sphacelata* Hack., *S. trinii* Kunth.

Herb.

Departmental distribution: Amambay, Guairá.

Voucher: *E. Hassler & T. Rojas 10141* (Zuloaga et al. 2014).

Setaria tenax (Rich.) Desv., Opusc. Sci. Phys. Nat. 78. 1831.

Syn.: *Panicum tenax* A.Rich., *Setaria sphaerocarpa* (Salzm.) C.E.Hubb.

Herb.

Departmental distribution: Central, Concepción, Cordillera, Paraguari.

Voucher: *E.M. Zardini & C. Velázquez 26273* (FCQ, MO).

Sorghum halepense (L.) Pers. var. ***halepense***, Syn. Pl. 1: 101. 1805.

Syn.: *Andropogon halepensis* (L.) Brot., *A. sorghum* (L.) Brot. var. *halepensis* (L.) Hack., *Holcus halepensis* L., *Sorghum halepense* (L.) Pers. var. *genuinum* Hack., nom. inval.

Herb. Introduced.

Departmental distribution: Alto Paraná, Boquerón, Central, Itapúa.

Voucher: F. Mereles et al. 10084 (FCQ).

Sporobolus pyramidatus (Lam.) Hitchc., Man. Grasses W. Ind. 84. 1936.

Syn.: *Agrostis pyramidata* Lam., *Sporobolus argutus* (Nees) Kunth, *S. argutus* f. *purpurascens* Hack., *S. argutus* var. *tuberculatus* (Hack.) Hack., *S. tuberculatus* Hack., *Vilfa arguta* Nees

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Paraguari, Presidente Hayes.

Voucher: F. Mereles & S. Soria 9970 (BM, CTES, FCQ, G).

Stapfchloa elata (Desv.) P.M.Peterson, Taxon 64: 460. 2015.

Syn.: *Andropogon barbatus* L., *A polydactylon* L., nom. illeg., *Chloris barbata* (L.) Nash, hom. illeg., *C. dandyana* C.D.Adams, *C. elata* Desv., *C. polydactyla* (L.) Sw., *C. polydactyla* f. *pauciradiata* Kurtz

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes.

Voucher: F. Mereles & S. Soria 9973 (BM, FCQ, G).

****Tragus australianus*** S.T.Blake, Univ. Queensl. Papers, Dept. Biol. 1 (18): 12. 1941.

Herb. Introduced.

Departmental distribution: Boquerón.

Voucher: F. Mereles & S. Soria 9942 (FCQ, G).

Trichloris crinita (Lag.) Parodi, Revista Argent. Agron. 14: 63. 1947.

Syn.: *Chloris crinita* Lag., *Chloris mendocina* Phil., *Chloropsis blanchardiana* (E.Fourn. ex Scribn.) Kuntze, *Chloropsis crinita* (Lag.) Kuntze, *Chloropsis mendocina* (Phil.)

Kuntze, *Trichloris blanchardiana* E.Fourn. ex Scribn., *T. crinita* (Lag.) Parodi var. *triflora* Parodi, *T. crinita* var. *typica* Parodi, nom. inval., *T. mendocina* (Phil.) Kurtz, *T. mendocina* f. *blanchardiana* (E.Fourn. ex Scribn.) Kurtz, *T. mendocina* (Phil.) Kurtz ex Seckt, hom. illeg.

Herb.

Departmental distribution: Alto Paraguay, Boquerón.

Voucher: *F. Mereles & S. Soria 9976* (FCQ).

Urochloa brizantha (Hochst. ex A.Rich.) R.D.Webster, Austral. Paniceae (Poaceae) 233. 1987.

Syn.: *Brachiaria brizantha* (Hochst. ex A.Rich.) Stapf, *Panicum brizanthum* Hochst. ex A.Rich.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Canindeyú, Central, San Pedro.

Voucher: *F. Mereles et al. 10075* (FCQ).

Urochloa decumbens (Stapf) R.D.Webster, Austral. Paniceae (Poaceae) 234. 1987.

Herb. Introduced.

Departmental distribution: Cordillera, San Pedro.

Voucher: *O. Morrone & J. Pensiero 371* (FCQ).

Urochloa paucispicata (Morong) Morrone & Zuloaga, Darwiniana 31: 95. 1992.

Syn.: *Acroceras paucispicata* (Morong) Henrard, *Brachiaria paucispicata* (Morong) Clayton, *Panicum paucispicatum* Morong

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Central, Concepción, Cordillera, Presidente Hayes.

Voucher: *F. Mereles & S. Soria 9943* (BM, CTES, FCQ, G).

Urochloa plantaginea (Link.) R.D.Webster, Syst. Bot. 13(4): 607. 1988.

Syn.: *Brachiaria plantaginea* (Link) Hitchc., *Panicum plantagineum* Link

Herb.

Departmental distribution: Alto Paraguay, Central, Concepción, Cordillera, Guairá, San Pedro.

Voucher: *J. De Egea et al.* 1291 (FCQ).

POLYGONACEAE

Polygonum acuminatum Kunth, Nov. Gen. Sp. 2: 178. 1817.

Syn.: *Persicaria acuminata* (Kunth) M.Gómez, *Polygonum acuminatum* Kunth var. *glabrescens* Meisn., *Polygonum acuminatum* var. *microstemom* Mart. ex Meisn., *Polygonum acuminatum* var. *setigerum* (Wedd.) Meisn., *Polygonum alfredi* Pilg., *Polygonum bettfreundianum* Lindau, *Polygonum floribundum* Wedd., *Polygonum setigerum* Wedd.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *A. Schinini & R. Palacios* 25915 (FCQ).

Polygonum aviculare L., Sp. Pl. 1: 362 (-363). 1753.

Syn.: *Polygonum arenastrum* Boreau, *P. berteroi* Phil., *P. striatum* K.Koch, *P. uruguense* H.Gross

Herb. Introduced.

Departmental distribution: Presidente Hayes.

Voucher: *T. Rojas* 409 (Cialdella and Brandbyge 2001).

Polygonum convolvulus L., Sp. Pl. 1: 364. 1753.

Syn.: *Bilderdykia convolvulus* (L.) Dumort., *Fallopia convolvulus* (L.) A.Löve, *Tiniaria convolvulus* (L.) Webb & Moq.

Herb. Introduced.

Departmental distribution: Cordillera, Guairá, Itapúa.

Voucher: *E. Lurvey* 17 (CTES).

Polygonum hispidum Kunth, Nov. Gen. Sp. (quarto ed.) 2: 178. 1817.

Syn.: *Persicaria hispida* (Kunth) M.Gómez

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Central, Cordillera, Ñeembucú, Presidente Hayes.

Voucher: *F. Mereles et al.* 10117 (FCQ, G).

Polygonum hydropiperoides Michx. var. ***setaceum*** (Baldwin) Gleason, Phytologia 4(1): 23. 1952.

Syn.: *Polygonum hydropiperoides* Michx. var. *virgatum* (Cham. & Schltdl.) Meisn., *P. setaceum* Baldwin, *P. virgatum* Cham. & Schltdl.

Herb.

Departmental distribution: Caazapá, Central, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 691 (BM, FCQ).

Polygonum lapathifolium L., Sp. Pl. 1: 360. 1753.

Syn.: *Persicaria laphatifolia* (L.) Delarbre, *Polygonum ferrugineum* Wedd. var. *patagonicum* (Speg.) Macloskie, *Polygonum lanigerum* R.Br., *Polygonum persicaria* L. var. *vernicosum* Cham. & Schltdl., *Polygonum spectabile* Mart. ex Meisn. var. *patagonica* Speg., *Polygonum utriculatum* J.Remy

Herb. Introduced.

Departmental distribution: Concepción, Presidente Hayes.

Voucher: *F. Mereles* 1387 (FCQ).

Polygonum meisnerianum Cham. & Schltdl., Linnaea 3(1): 40–42. 1828.

Syn.: *Persicaria meisneriana* (Cham. & Schltdl.) M.Gómez, *Polygonum beyrichianum* Cham. & Schltdl., *Polygonum chamissoeanum* Wedd., *Polygonum meisnerianum* Cham. & Schltdl. var. *beyrichianum* (Cham. & Schltdl.) Meisn., *Polygonum meisnerianum* var. *setosum* Chodat & Hassl.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caazapá, Central, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, San Pedro.

Voucher: *R. Degen* 9 (FCQ).

Polygonum punctatum Elliot, Sketch Bot. S. Carolina 1(5): 455–456. 1821.

Syn.: *Persicaria punctata* (Elliot) Small, *Polygonum acre* Kunth, hom. illeg., *Polygonum epilobioides* Wedd., *Polygonum hydropiperoides* Pursh, hom. illeg.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10019 (BM, CTES, FCQ, G).

Rumex obovatus Danser, Ned. Kruidk. Arch. 1920: 241. 1921.

Syn.: *Rumex paraguayensis* auct. non D.Parodi

Herb.

Departmental distribution: Alto Paraná, Central, Guairá, Presidente Hayes.

Voucher: *F. Mereles et al.* 10092 (FCQ, G).

Rumex paraguayensis D.Parodi, Anales Soc. Ci. Argent. 5: 160. 1878.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Central, Cordillera, Misiones, Presidente Hayes.

Voucher: *R. Spichiger et al.* RS2209 (FCQ).

Rumex pulcher L., Sp. Pl. 1: 336. 1753.

Herb. Introduced.

Departmental distribution: Alto Paraná, Central, Cordillera, Misiones.

Voucher: *I. Basualdo* 1164 (FCQ).

PORTULACACEAE

Portulaca cryptopetala Speg., Anales Soc. Ci. Argent. 82: 217. 1916.

Syn.: *Portulaca cryptopetala* Speg. var. *diversifolia* (Poelln.) D.Legrand, *P. cryptopetala* var. *legrandii* (Poelln.) D.Legrand, *P. cryptopetala* f. *phenopetala* Speg., *P. diversifolia* D.Legrand, nom. illeg., *P. diversifolia* Poelln. var. *legrandii* (Poelln.) D.Legrand *P. legrandii* Poelln.

Herb.

Departmental distribution: Alto Paraguay, Central, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: F. Mereles 10125 (FCQ).

Portulaca oleracea L., Sp. Pl. 1: 445. 1753.

Syn.: *Portulaca cryptopetala* Speg. var. *poellnitziana* (D.Legrand) D.Legrand, *P. marginata* Kunth, *P. neglecta* Mack. & Bush, *P. oleracea* L. var. *granulato-stellulata* Poelln., *P. oleracea* var. *macrantha* Eggers, *P. oleracea* var. *micrantha* Eggers, *P. oleracea* var. *parviflora* (Haw.) Griseb., *P. oleracea* var. *silvestris* (Montandon) Thell., *P. poellnitziana* D.Legrand, *P. retusa* Engelm.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Boquerón, Central, Paraguari, Presidente Hayes, San Pedro.

Voucher: F. Mereles & S. Soria 9994 (FCQ).

RUBIACEAE

Borreria eryngioides Cham. & Schltdl. var. *affinis* (DC.) K.Schum., Fl. Bras. 6(6): 48. 1888.

Syn.: *Borreria affinis* DC., *B. assurgens* (Ruiz & Pav.) Griseb., *B. assurgens* Hassl. var. *longisepala* Hassl., *B. chacoensis* Hassl., *B. chacoensis* var. *glabrata* Hassl., *B. eryngioides* Cham. & Schltdl. var. *latifolia* Hassl., *B. parviflora* G.Mey. var. *scabra* Griseb.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Caazapá, Central, Guairá, Presidente Hayes.

Voucher: F. Mereles & S. Soria 10204 (FCQ, G).

Borreria verticillata (L.) G.Mey., Prim. Fl. Esseq. 83. 1818.

Syn.: *Borreria capitata* (Ruiz & Pav.) DC. f. *ferruginea* auct. non (A.St.-Hil.) Steyererm., *Spermacoce verticillata* L.

Herb or subshrub.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1242 (BM, FCQ).

Mitracarpus megapotamicus (Spreng.) Kuntze, Publ. Field Mus. Nat. Hist., Bot. Ser. 7: 331. 1931.

Syn.: *Mitracarpium cuspidatum* DC., *Mitracarpus megapotamicus* (Spreng.) Standl., comb. superfl., *Mitracarpium peladilla* Griseb., *Mitracarpus sellowianum* Cham. & Schltdl., *Spermacoce megapotamica* Spreng.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caaguazú, Caazapá, Central, Concepción, Guairá, Misiones, Paraguari, Presidente Hayes.

Voucher: *F. Mereles et al.* 10021 (FCQ).

Mitracarpus villosus (Sw.) DC., Prodr. 4: 572. 1830.

Syn.: *Mitracarpus hirtus* auct. non (L.) DC., *Spermacoce hirta* auct. non L., *S. villosa* Sw.

Herb.

Departmental distribution: Caaguazú, Caazapá, Canindeyú, Central, Paraguari.

Voucher: *F. Mereles et al.* 10103 (FCQ).

****Oldenlandia lancifolia*** (Schumach.) DC., Prodr. 4: 425. 1830.

Syn.: *Hedyotis lancifolia* Schumach.

Herb. Introduced.

Departmental distribution: Central, Cordillera.

Voucher: *F. Mereles* 10120 (FCQ).

Richardia brasiliensis Gomes, Mem. sobre Ipecac. 31. 1801.

Syn.: *Richardsonia brasiliensis* (Gomes) Hayne, *Richardia pilosa* auct. non Ruiz & Pav., *Richardsonia rosea* A.St.-Hil., *Richardia rosea* (A.St.-Hil.) Schult.f., *Richardia scabra* auct. non L., *Richardsonia brasiliensis* (Gomes) Hayne var. *dubia* Beauverd & Felipp., *Richardsonia scabra* auct. non (L.) A.St.-Hil.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1234 (FCQ).

Staelia virgata (Link ex Roem. & Schult.) K.Schum. var. ***virgata***, Fl. Bras. 6(6): 76. 1888.

Syn.: *Borreria finitima* S.Moore, *Mitracarpus virgatus* (Link ex Roem. & Schult.) Cham. & Schltdl., *Spermacoce virgata* Link ex Roem. & Schult., *Staelia caespitosa* Griseb.

Herb.

Departmental distribution: Alto Paraguay, Concepción, Cordillera, Misiones, Ñeembucú, Paraguari, Presidente Hayes.

Voucher: *F. Mereles & J. De Egea* 10152 (FCQ, G).

SOLANACEAE

Nicotiana glauca Graham, Edinburgh New Philos. J. 5: 175. 1828.

Syn.: *Acnistus virgatus* Griseb., *Nicotiana glauca* Graham var. *angustifolia* Comes, *Nicotiana glauca* var. *decurrens* Comes, *Nicotiana glauca* var. *grandiflora* Comes, *Nicotiana glauca* f. *lateritia* Lillo, *Nicotiana glauca* var. *typica* Millán, nom. inval., *Nicotidendron glauca* (Graham) Griseb., *Siphaulax glabra* Raf.

Shrub or subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Central, Cordillera, Ñeembucú, Paraguari.

Voucher: *F. Mereles et al.* 10156 (BM, FCQ, G).

Nicotiana longiflora Cav., Descr. Pl. 106. 1802.

Syn.: *Nicotiana acuta* Griseb., *N. acutiflora* A.St.-Hil., *N. longiflora* Cav. var. *acutiflora* (A.St.-Hil.) Comes, *N. longiflora* var. *breviflora* Comes, nom. inval., *N. longiflora* var. *grandifolia* Morong

Herb.

Departmental distribution: Boquerón, Central, Concepción, Cordillera, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10055 (FCQ).

Physalis angulata L., Sp. Pl. 1: 183. 1753.

Herb.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Guairá, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1319 (BM, FCQ).

Solanum americanum Mill., Gard. Dict. (ed. 8) no. 5. 1768.

Syn.: *Solanum adventitium* Polg., *S. americanum* Mill. var. *nodiflorum* (Jacq.) Edmonds, *S. sciaphilum* Bitter, *S. curtipes* Bitter, *S. nigrum* L. var. *americanum* (Mill.) O.E.Schulz, *S. nigrum* var. *virginicum* L., *S. nodiflorum* Jacq., *S. nodiflorum* var. *acuminatum* Chodat, *S. nodiflorum* var. *micropyllum* Hassl., *S. nodiflorum* var. *petiolastrum* Dunal, *S. nodiflorum* var. *sapucayense* Chodat, *S. oleraceum* Dunal, *S. tenellum* Bitter.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Boquerón, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1320 (BM, FCQ).

Solanum chacoense Bitter, Repert. Spec. Nov. Regni Veg. 11: 18. 1912.

Syn.: *Solanum arnezii* Cárdenas, *S. bitteri* Hassl., *S. boergeri* Bukasov, *S. caipipendense* Cárdenas, *S. calvescens* Bitter, *S. chacoense* var. *angustisectum* (Hassl.) Hassl., *S. chacoense* f. *caipipendense* (Cárdenas) Correll, *S. chacoense* f. *gibberulosum* (Juz. & Bukasov) Correll, *S. chacoense* f. *glabrescens* (Hassl.) Hassl., *S. chacoense* var. *latisectum* (Hassl.) Hassl., *S. chacoense* subsp. *muelleri* (Bitter) Hawkes, *S. chacoense* f. *plurijugum* Hassl., *S. chacoense* f. *puberulum* Hassl., *S. chacoense* subsp. *subtilius* (Bitter) Hawkes,

S. commersonii var. *glabriusculum* J.Rémy, *S. cuevoanum* Cárdenas, *S. dolichostigma* Buk. ex Lechn., *S. emmeae* Juz. & Bukasov, *S. garciae* Juz. & Bukasov, *S. gibberulosum* Juz. & Bukasov, *S. guaraniticum* Hassl., *S. guaraniticum* var. *angustisectum* Hassl., *S. guaraniticum* f. *glabrescens* Hassl., *S. guaraniticum* var. *latisectum* Hassl., *S. horovitzii* Bukasov, *S. horovitzii* var. *glabristylum* Hawkes, *S. horovitzii* var. *multijugum* Hawkes, *S. jamesii* var. *grandifrons* Bitter, *S. jujuyense* Hawkes, *S. knappei* Juz. & Bukasov, *S. laplaticum* Bukasov, *S. limense* Correll, *S. muelleri* Bitter, *S. muelleri* f. *densipilosum* Correll, *S. parodii* Juz. & Bukasov, *S. pseudomaglia* L.Planch., *S. saltense* Hawkes, *S. schickii* Juz. & Bukasov, *S. subtilius* Bitter, *S. tuberosum* subsp. *yanacochense* Ochoa, *S. yanacochense* (Ochoa) Gorbat., *S. yungasense* Hawkes.

Herb.

Departmental distribution: Boquerón, Central, Concepción, Cordillera, Guairá, Itapúa, Paraguairí, Presidente Hayes, San Pedro.

Voucher: *I. Basualdo* 270 (FCQ).

Solanum granuloso-leprosum Dunal, Prodr. 13(1): 115. 1852.

Syn.: *Solanum auriculatum* auct. non Aiton, *S. verbascifolium* f. *eupulverulentum* Hassl., *S. verbascifolium* L. f. *granuloso-leprosum* (Dunal) Hassl.

Shrub or tree.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñemembucú, Paraguairí, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1310 (FCQ).

Solanum guaraniticum A.St.-Hil., Mém. Mus. Hist. Nat. 12: 321. 1825.

Syn.: *Solanum bonariense* L. f. *intermedium* Hassl., *S. bonariense* f. *leptophyllum* Chodat, *S. bonariense* f. *lobatum* (Chodat) Hassl., *S. bonariense* var. *paraguariense* (Chodat) Chodat, *S. bonariense* f. *subintegrum* (Hassl.) Chodat, nom. illeg., *S. bonariense* f. *typicum* Hassl., nom. inval., *S. bonariense* var. *villaricense* (Morong) Chodat, *S. fastigiatum* Willd. var. *acicularium* Dunal, *S. paraguariense* Chodat, *S. villaricense* Morong, *S. villaricense* f. *lobatum* Hassl., *S. villaricense* var. *paraguariense* (Chodat) Hassl., *S. villaricense* f. *subintegrum* Hassl., *S. villaricense* Hassl., nom. inval. var. *typicum*.

Shrub.

Departmental distribution: Alto Paraná, Caaguazú, Caazapá, Canindeyú, Central, Guairá, Itapúa, Misiones, Paraguairí, Presidente Hayes.

Voucher: *F. Mereles et al.* 10024 (BM, FCQ, G).

Solanum palinacanthum Dunal, Prodr. 13(1): 245. 1852.

Syn.: *Solanum claviceps* Griseb., *S. palinacanthum* Dunal var. *acutilobum* Dunal, *S. palinacanthum* f. *velutinum* Chodat, *S. vexans* S.Moore

Shrub or small tree.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10014 (BM, FCQ, G).

Solanum pseudocapsicum L., Sp. Pl. 1: 184. 1753.

Syn.: *Solanum capsicastrum* Link ex Schauer, *S. capsicastrum* var. *caaguazuense* Chodat, *S. diflorum* Vell., *S. diflorum* var. *angustifolium* Kuntze, *S. ipecacuanha* Chodat var. *calvescens* Chodat, *S. pavimenti* L.B.Sm. & Downs, *S. pseudocapsicum* var. *ambiguum* Hassl., *S. pseudocapsicum* L. f. *calvescens* (Chodat) Hassl., *S. pseudocapsicum* ssp. *diflorum* (Vell.) Hassl., *S. pseudocapsicum* var. *hygrophilum* (Schltdl.) Hassl., *S. pseudocapsicum* var. *normale* Kuntze, *S. pseudocapsicum* var. *parvifolium* Kuntze, *S. pseudocapsicum* f. *pilosum* Kuntze, *S. pseudocapsicum* f. *pilosulum* Hassl., *S. pseudocapsicum* var. *sendtnerianum* Hassl., *S. pseudocapsicum* var. *typicum* Hassl., nom. inval.

Subshrub.

Departmental distribution: Alto Paraguay, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Cordillera, Guairá, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1263 (FCQ).

Solanum sisymbriifolium Lam., Tabl. Encycl. 2: 25. 1794.

Syn.: *Solanum balbisii* Dunal, *S. balbisii* var. *bipinnata* Hook., *S. balbisii* var. *oligospermum* Sendtn., *S. balbisii* var. *purpureum* Hook., *S. bipinnatifidum* Larrañaga, *S. decurrens* Balb., *S. sisymbriifolium* f. *albiflorum* Kuntze, *S. sisymbriifolium* Lam. var. *brevilobum* Dunal, *S. sisymbriifolium* var. *heracleifolium* Sendtn., nom. inval., *S. sisymbriifolium* f. *lilacinum* Kuntze, *S. sisymbriifolium* var. *macrocarpum* Kuntze, *S. sisymbriifolium* var. *oligospermum* (Sendtn.) Dunal, *S. sisymbriifolium* var. *purpureiflorum* Dunal, *S. subviscidum* Schrank

Herb or subshrub.

Departmental distribution: Alto Paraguay, Boquerón, Caaguazú, Central, Cordillera, Guairá, Itapúa, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10015 (FCQ, G).

Solanum tweedieanum Hook., Bot. Mag. 62: t.3385. 1835.

Syn.: *Solanum atriplicoides* Herter, *S. meizonanthum* Bitter, *S. physalidicalyx* Bitter, *S. physalidicalyx* var. *integrescens* Bitter, *S. physalidicalyx* var. *plurilobulatum* Bitter, *S. sidifolium* Speg.

Herb.

Departmental distribution: Alto Paraguay, Boquerón, Presidente Hayes.

Voucher: F. Mereles & S. Soria 9992 (FCQ, G, BM, CTES).

Solanum viarum Dunal, Prodr. 13(1): 240. 1852.

Syn.: *Solanum chloranthum* DC., hom. illeg., *S. reflexum* auct. non Schrank, *S. viridiflorum* Schltdl.

Shrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Boquerón, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Ñeembucú, Paraguairí, San Pedro.

Voucher: F. Mereles & S. Soria 9974 (FCQ).

TALINACEAE

Talinum fruticosum (L.) Juss., Gen. Pl. 312. 1789.

Syn.: *Portulaca fruticosa* L., *P. racemosa* L., *P. triangularis* Jacq., *Talinum racemosum* (L.) Rohrb., *T. triangulare* (Jacq.) Willd.

Subshrub. Introduced.

Departmental distribution: Alto Paraguay, Boquerón, Cordillera, Paraguairí, Presidente Hayes, San Pedro.

Voucher: F. Mereles & S. Soria 9963 (BM, CTES, FCQ, G).

Talinum paniculatum (Jacq.) Gaertn., Fruct. Sem. Pl. 2: 219. 1791.

Syn.: *Portulaca paniculata* Jacq., *P. patens* L., *Talinum patens* (L.) Willd.

Herb. Introduced.

Departmental distribution: Alto Paraguay, Amambay, Boquerón, Caazapá, Canindeyú, Central, Cordillera, Guairá, Paraguairí, Presidente Hayes, San Pedro.

Voucher: M. Peña-Chocarro & J. De Egea 2453 (BM, CTES, FCQ, MO).

URTICACEAE

Parietaria debilis G.Forst., Fl. Ins. Austr. 73. 1786.

Syn.: *Freirea erecta* Phil., *F. humifusa* Gay, *Parietaria debilis* G.Forst. var. *diffusa* Wedd., *P. debilis* var. *gracilis* (Lowe) Wedd., *P. debilis* var. *micrantha* (Ledeb.) Wedd., *P. fernandeziana* (Steud.) L.E.Navas, *P. gracilis* Lowe, *P. humifusa* (Gay) Blume, *P. micrantha* Ledeb., *Urtica fernandeziana* Steud., *U. parietariaefolia* Bertero ex Steud.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caazapá, Central, Concepción, Cordillera, Guairá, Paraguari.

Voucher: J. De Egea 1295 (BM, FCQ, G).

VERBENACEAE

Aloysia virgata (Ruiz & Pav.) Pers. var. ***platyphylla*** (Briq.) Moldenke, Phytologia 2: 310. 1947.

Syn.: *Aloysia naviculata* Ravenna, *A. virgata* (Ruiz & Pav.) Pers. var. *elliptica* (Briq.) Moldenke, *Lippia virgata* (Ruiz & Pav.) Steud. var. *elliptica* Briq., *L. virgata* var. *platyphylla* Briq.

Shrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: F. Mereles 9928 (BM, FCQ, G).

****Glandularia cabreræ*** (Moldenke) Botta, Bol. Soc. Argent. Bot. 26: 243. 1990.

Syn.: *Verbena cabreræ* Moldenke, *V. dissecta* Willd. ex Spreng. f. *alba* Moldenke

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná.

Voucher: F. Mereles et al. 10067 (FCQ).

Glandularia tomophylla (Briq.) P.Peralta, Darwiniana 45: 241. 2007.

Syn.: *Glandularia spectabilis* (Moldenke) Botta, *Verbena calliantha* Briq., *V. calliantha* var. *microsoma* Briq., *V. megapotamica* Spreng. var. *pinnatiloba* Kuntze, *V. pin-*

natiloba (Kuntze) Moldenke, *V. ramboi* Moldenke, *V. spectabilis* Moldenke, *V. storeoclada* Briq., *V. tomophylla* Briq.

Herb.

Departmental distribution: Alto Paraguay, Alto Paraná, Caaguazú, Central, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari.

Voucher: *J. De Egea et al.* 1136 (BM, FCQ, G).

Glandularia tweediana (Niven ex Hook.) P.Peralta, Ann. Missouri Bot. Gard. 98(3): 400. 2011.

Syn.: *Glandularia incisa* (Hook.) Tronc., *Verbena incisa* Hook., *V. megapotamica* Spreng. var. *truncatula* Briq., *V. megapotamica* var. *tweediana* (Niven ex Hook.) Kuntze, *V. tweediana* Niven ex Hook., *V. tweediana* var. *arriana* Niven ex Maund.

Herb.

Departmental distribution: Alto Paraguay, Caaguazú, Central, Cordillera, Guairá, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1274 (BM, FCQ).

Stachytarpheta cayennensis (Rich.) Vahl, Enum. Pl. 1: 208. 1804.

Syn.: *Stachytarpheta australis* Moldenke, *S. cayennensis* (Rich.) Vahl f. *alba* Moldenke ex Tronc. & Botta, *S. cayennensis* f. *albiflora* Moldenke, *S. cayennensis* var. *candicans* Briq., *S. cayennensis* var. *virescens* Briq., *S. dichotoma* (Ruiz & Pav.) Vahl, *S. maximiliani* Schauer var. *ciliaris* Moldenke, *S. patens* Moldenke, *Verbena cayennensis* Rich., *V. dichotoma* Ruiz & Pav.

Herb or subshrub.

Departmental distribution: Alto Paraguay, Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *J. De Egea et al.* 1221 (BM, FCQ).

Verbena litoralis Kunth var. *litoralis*, Nov. Gen. Sp. 2: 276, t. 137. 1818.

Syn.: *Verbena affinis* M.Martens & Galeotti, *V. approximata* Briq., *V. bonariensis* L. var. *litoralis* (Kunth) Gillies & Hook. ex Hook., *V. caracasana* Kunth, *V. cordobensis* Briq., *V. integrifolia* Sessé & Moç., *V. integrifolia* f. *albiflora* Chodat, *V. litoralis* Kunth var. *albiflora* Moldenke, *V. litoralis* f. *albiflora* (Moldenke) Moldenke *V. litoralis* f. *angustifolia* Chodat, *V. litoralis* var. *caracasana* (Kunth) Briq., *V. litoralis*

var. *glabrior* Benth., *V. litoralis* var. *leptostyachya* Schauer, *V. litoralis* var. *pyncostachya* Schauer, nom. inval., *V. nudiflora* Nutt. ex Turcz.

Herb.

Departmental distribution: Alto Paraná, Amambay, Caaguazú, Caazapá, Canindeyú, Central, Concepción, Cordillera, Guairá, Itapúa, Misiones, Ñeembucú, Paraguari, Presidente Hayes, San Pedro.

Voucher: *F. Mereles et al.* 10091 (FCQ, G).

Verbena montevidensis Spreng., Syst. Veg. (ed. 16) 2:747. 1825.

Syn.: *Verbena isabellei* Briq., *V. minutiflora* Briq. ex Moldenke, *V. minutiflora* var. *peruviana* Moldenke.

Herb.

Departmental distribution: Alto Paraguay, Caaguazú, Caazapá, Central, Cordillera, Guairá, Itapúa, Misiones, Paraguari, Presidente Hayes.

Voucher: *R. Degen et al.* 1729 (FCQ).

Acknowledgments

We thank Monsanto Paraguay, the Instituto de Biotecnología Agrícola (INBIO) and the company Dekalpar S.A. for financing the fieldwork and facilitating access to crop trials. We also thank Silvina Soria and Gerardo Berton for joining fieldtrips and sharing their expertise on crop and weed management. We are especially grateful to the curators of FCQ, BM and CTES for their assistance with specimen identification, and to Mariana Martinez for her kind support.

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